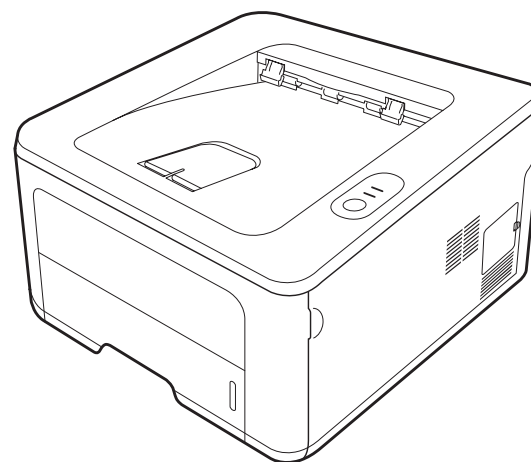# SP 3300 Series

User's Guide

Read this manual carefully before you use this machine and keep it handy for future reference. For safe and correct use, please be sure to read the Safety Information in this manual before using the machine.

Contents

8. Maintenance

9. Troubleshooting

10. Installing accessories

11. Specifications

Safety Information

When using this machine, the following safety precautions should always be followed.

Safety During Operation

In this manual, the following important symbols are used:

⚠ **WARNING:**
Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.

⚠ **CAUTION:**
Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

⚠ **WARNING:**

- **Disconnect the power plug (by pulling the plug, not the cable) if the power cable or plug becomes frayed or otherwise damaged.**

- **To avoid hazardous electric shock or laser radiation exposure, do not remove any covers or screws other than those specified in this manual.**

- **Turn off the power and disconnect the power plug (by pulling the plug, not the cable) if any of the following occurs:**
    - **You spill something into the machine.**
    - **You suspect that your machine needs service or repair.**
    - **The external housing of your machine has been damaged.**

- **Do not incinerate used toner or toner containers. Toner dust might ignite when exposed to an open flame.**

- **Do not store toner, used toner, or toner containers in a place with an open flame. The toner might ignite and cause burns of a fire.**

- **Disposal can take place at our authorized dealer.**

- **Dispose of used toner containers in accordance with local regulations.**

- **Keep the machine away from flammable liquids, gases, and aerosols. A fire or an electric shock might occur.**

- **Connect the machine to the power source specified on the inside front cover of this manual and do not use any other power sources. Connect the power cord directly to a wall outlet and do not use an extension cord. Power sources not specified on the inside front cover of this manual and extension cords are electric shock or fire hazards.**

- **Do not make modifications or replacements other than those mentioned in this manual.**

- **Power cords that are damaged, broken, modified, trapped under heavy objects, pulled hard, or bent severely are electric shock and fire hazards.**

- **If the power cord is damaged (exposure of the core, disconnection, etc.), contact your service representative to change a new one. Operating the machine with a damaged power cord may cause an electric shock or fire.**

⚠ *CAUTION:*

- *Protect the machine from dampness or wet weather, such as rain and snow.*

- *Unplug the power cord from the wall outlet before you move the machine. While moving the machine, you should take care that the power cord will not be damaged under the machine.*

- *When you disconnect the power plug from the wall outlet, always pull the plug (not the cable).*

- *To disconnect the power cord, pull it out by plug. Do not drag the cord itself. Doing so may result in damage to the cord, leading to fire or electric shock.*

- *For safety reason, unplug the power cord from the wall outlet if the machine will not be used for an extended period of time such as holidays.*

- *Do not allow paper clips, staples, or other small metallic objects to fall inside the machine.*

- *Keep toner (used or unused) and toner cartridge out of reach of children.*

- *Be careful not to cut yourself on any sharp edges when you reach inside the machine to remove misfed sheets of paper or masters.*

- *For environmental reasons, do not dispose of the machine or expended supply waste at household waste collection points. Disposal can take place at an authorized dealer.*

- *The inside of the machine could be very hot. Do not touch the parts with a label indicating the "hot surface". Otherwise, an injury might occur.*

- *The fusing section of this machine might be very hot. Caution should be taken when removing misfed paper.*

- *Keep the machine away from humidity and dust. Otherwise a fire or an electric shock might occur.*

- *Do not place the machine on an unstable or tilted surface. If it topples over, an injury might occur.*

- *Do not use aluminum foil, carbon paper, or similar conductive paper to avoid a fire or a machine failure.*

- *Make sure the room where you are using the machine is well ventilated and spacious. Good ventilation is especially important when the machine is used heavily.*

- *Do not open toner containers forcefully. Toner can spill, dirtying your clothes or hands, and possibly resulting in accidental ingestion.*

- *If toner or used toner is inhaled, gargle with plenty of water and move into a fresh air environment. Consult a doctor if necessary.*

- *If toner or used toner gets into your eyes, flush thoroughly with eyewash or water. Consult a doctor if necessary.*

- *If toner or used toner is swallowed, dilute by drinking a large amount of water. Consult a doctor if necessary.*

- *Avoid getting toner on your clothes or skin when removing a paper jam or replacing toner. If your skin comes into contact with toner, wash the affected area thoroughly with soap and water.*

- *If toner gets on your clothing, wash with cold water. Hot water will set the toner into the fabric and may make removing the stain impossible.*

- *Do not look into the lamp - it can damage your eyes.*

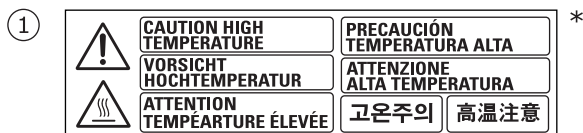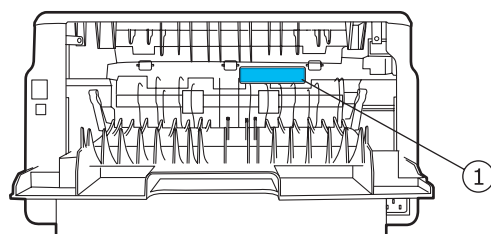- *When loading paper, take care not to trap or injure your fingers.*

Notes for Users

If you continuously print multiple pages, moist or vapor may appear from the paper exit area. However this will not have any impact on the performance of your printer. Be cautious not to touch the surface, or wait until cooled down, and keep children away from the surface.

Power Supply

The socket-outlet shall be in stalled near the product and shall be easily accessible.

Positions of Labels and Hallmarks for ⚠ WARNING and ⚠ CAUTION Labels

This machine has labels for ⚠WARNING and ⚠CAUTION at the positions shown below. For safety, please follow the instructions and handle the machine as indicated.

①	CAUTION HIGH TEMPERATURE	PRECAUCIÓN TEMPERATURA ALTA
	VORSICHT HOCHTEMPERATUR	ATTENZIONE ALTA TEMPERATURA
	ATTENTION TEMPÉARTURE ÉLEVÉE	고온주의 高温注意

*This label is stuck to hot surfaces. Be careful not to touch these areas.

In accordance with IEC 60417, this machine uses the following symbols for the main power switch:

❘ **means POWER ON.**

○ **means POWER OFF.**

Power Saver

This printer contains advanced energy conservation technology that reduces power consumption when it is not in active use.

When the printer does not receive data for an extended period of time, power consumption is automatically lowered.

ENERGY STAR® Program

The ENERGY STAR® Program encourages energy conservation by promoting energy efficient computers and other office equipment.

The program backs the development and dissemination of products that feature energy saving functions.

It is an open program in which manufacturers participate voluntarily.

Targeted products are computers, monitors, printers, facsimiles, copiers, scanners, and multifunction devices. Energy Star standards and logos are internationally uniform.

Recycling

Please recycle or dispose of packaging materials for this product in an environmentally responsible manner.

User Information on Electrical & Electronic Equipment

Users in the EU, Switzerland and Norway

Our Products contain high quality components and are designed to facilitate recycling.

Our products or product packaging are marked with the symbol below.

The symbol indicates that the product must not be treated as municipal waste. It must be disposed of separately via the appropriate return and collection systems available. By following these instructions you ensure that this product is treated correctly and help to reduce potential impacts on the environment and human health, which could otherwise result from inappropriate handling. Recycling of products helps to conserve natural resources and protect the environment. For more detailed information on collection and recycling systems for this product, please contact the shop where you purchased it, your local dealer or sales/service representatives.

All Other Users

If you wish to discard this product, please contact your local authorities, the shop where you bought this product, your local dealer or sales/service representatives.

Laser Safety:

Caution:

Use of controls or adjustment or performance of procedures other than those specified in this manual might result in hazardous radiation exposure.

For Users in Europe

This machine is considered class 1 laser device, safe for office/ EDP use. The machine contains 1 AlGaAs laser diode, 10 milliwatt, 770 - 795 nanometer wavelength for each emitter.

Direct (or indirect reflected) eye contact with the laser beam might cause serious eye damage. Safety precautions and interlock mechanisms have been designed to prevent any possible laser beam exposure to the operator.

The following label is attached on rear side of the printer.

CLASS 1 LASER PRODUCT

For Users in the United States of America

CDRH Regulations

This equipment complies with requirements of 21 CRF subchapter J for class 1 laser products. This equipment contains 1 AlGaAs laser diode, 10 milliwatt, 770 - 795 nanometer wavelength for each emitter. This equipment does not emit hazardous light, since the beam is totally enclosed during all customer modes of operation and maintenance.

Note to users in the United States of America

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio /TV technician for help.

Caution

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Declaration of Conformity

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and

2. this device must accept any interference received,

including interference that may cause undesired operation.

Responsible party: Ricoh Americas Corporation

Address: 5 Dedrick Place, West Caldwell, NJ 07006

Telephone number: 973-882-2000

Product Name: Laser Printer

Model Number: SP 3300DN/SP 3300D

Notes for Users

LAMP(S) INSIDE THIS PRODUCT CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL, STATE OR FEDERAL LAWS.

Note to users in Canada

Note:

This Class B digital apparatus complies with Canadian ICES- 003.

Remarque concernant les utilisateurs au Canada

Avertissement

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

1 Introduction

Congratulations on the purchase of your printer!

This chapter includes:

- **Special features**
- **Printer overview**
- **Control panel overview**
- **Understanding the LEDs**
- **Finding more information**
- **Setting up the hardware**
- **Altitude adjustment**
- **Changing the font setting**

Special features

Your new printer is equipped with several special features that improve the print quality. You can:

Print with excellent quality and high speed

- You can print up to **1200 x 1200 dpi** effective output. See the Software Section.
- Your printer prints A4-sized paper at up to 28 ppm[a] and letter-sized paper at up to 30 ppm. For duplex printing, your printer prints A4-sized paper at up to 14 ipm[b] and letter-sized paper at up to 14.5 ipm.

Handle paper flexibly
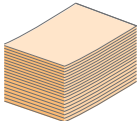
- Manual tray supports one sheet of envelopes, labels, transparencies, custom-sized materials, postcards and heavy paper.
- Standard 250-sheet tray supports plain paper.
- 150-sheet output tray supports convenient access.

Create professional documents
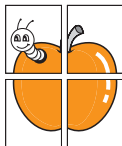
- Print **Watermarks**. You can customize your documents with words, such as "Confidential". See the Software Section.
- Print **Booklets**. This feature enables you to easily print a document to create a book. Once printed, all you have to do is fold and staple the pages. See the Software Section.
- Print **Posters**. The text and pictures of each page of your document are magnified and printed across the sheet of paper and can then be taped together to form a poster. See the Software Section.

Save time and money
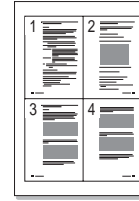
- Your printer allows you to use toner save mode to save toner. See the Software Section.
- You can print on both sides of the paper to save paper. See the Software Section.
- You can print multiple pages on a single sheet of paper to save paper. See the Software Section.
- You can use preprinted forms and letterhead with plain paper. See the Software Section.
- Your printer automatically **conserves electricity** by substantially reducing power consumption when not in use.

Expand the printer capacity
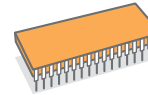
- Your printer has 32 MB of memory which can be expanded to **160 MB**. See page 10.1.
- You can add a 250-sheet optional tray 2 to your printer. This tray lets you add paper to the printer less often.

* Zoran IPS Emulation compatible with PostScript 3

- © Copyright 1995-2005, Zoran Corporation. All rights reserved. Zoran, the Zoran logo, IPS/PS3 and OneImage are trademarks of Zoran Corporation.

* 136 PS3 fonts

- Contains UFST and MicroType from Monotype Imaging Inc.

Print in various environments

- You can print in **Windows 2000/XP/Vista** and **Windows Server 2003**.
- Your printer is compatible with **Macintosh**.
- Your printer comes with **USB** interfaces.

a. pages per minute
b. images per minute

Machine features

The table below shows a general overview of features supported by your printer.
(I: Installed, NA: Not Available)

Features	SP 3300D	SP 3300DN
USB 2.0 (USB 2.0: Hi-Speed USB 2.0)	I	I
Network Interface (Ethernet 10/100 Base TX)	NA	I
PCL Emulation	I	I
PostScript Emulation	I	I
Duplex printing[a]	I	I

a. Printing on both sides of paper.

Printer overview

Front view
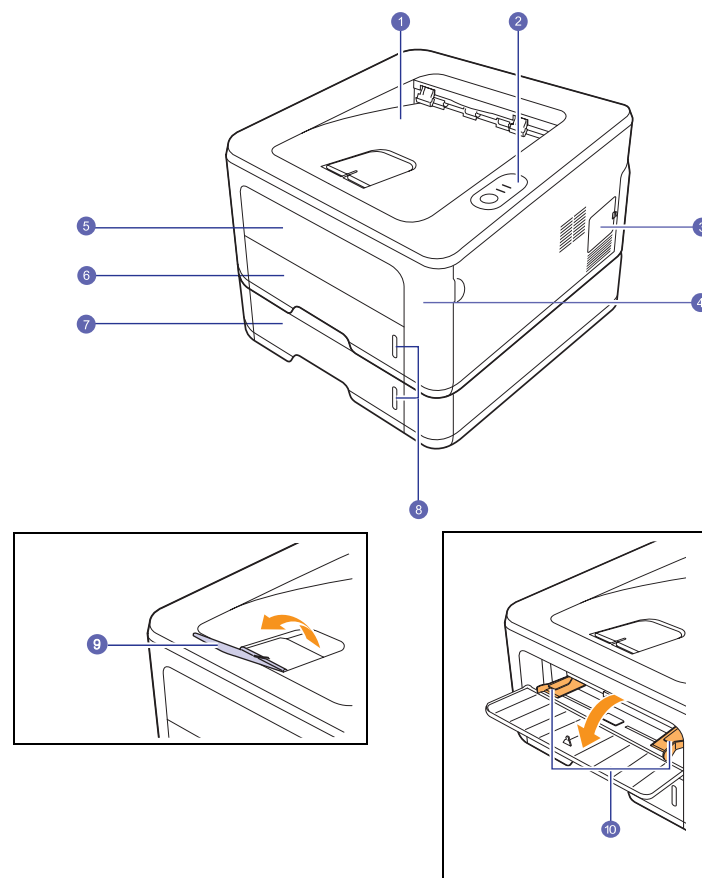
* SP 3300DN is shown in the above figure.

1	output tray	6	tray 1
2	control panel	7	optional tray 2
3	control board cover	8	paper level indicator
4	front cover	9	output support
5	manual tray	10	manual tray paper width guides

Rear view
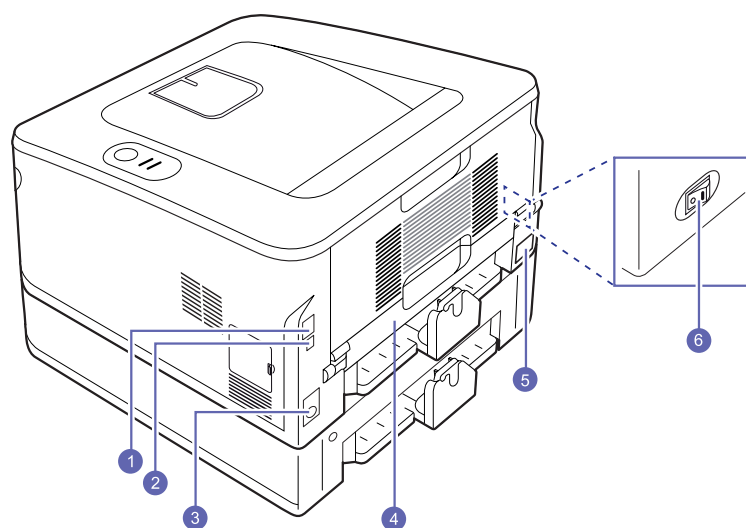
* SP 3300DN is shown in the above figure.

1	network port[a]	4	duplex unit
2	USB port	5	power receptacle
3	optional tray 2 cable connector	6	power switch

a. SP 3300DN only.

Control panel overview

Alert
DE	Fehler	DK	Fejl
FR	Alarme	NO	alarm
IT	Avviso	FI	Hälytys
ES	Alerta	HU	Riaszt.
PT	Alerta	PL	Błąd
NL	Waarsch	CZ	Výstr.
SE	Fel	RU	Вниман.
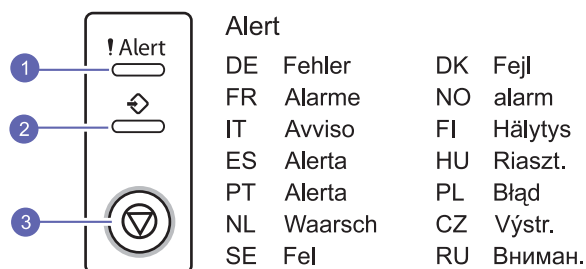
1	**Alert**: Indicates the status of your printer. See page 9.5.
2	**Online**: Indicates the status of your printer. See page 9.5.
3	**Cancel**: Prints a demo page or configuration page. Cancels the print job. Makes the printer pick up the print media.

Understanding the LEDs

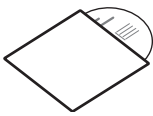| LED	Status		Description
Alert	Red	On	• The cover is open. Close the cover. • There is no paper in the tray. Load paper in the tray. • The printer has stopped printing due to a major error. • The toner cartridge is not installed. Install the toner cartridge. • Your system has some problems. If this problem occurs, contact your service representative. • The toner cartridge is totally exhausted. Remove the old toner cartridge and install a new one. See page 8.4.
		Blinking	• A minor error is occurring and the printer is waiting for the error to be cleared. When the problem is cleared, the printer resumes printing. • The toner cartridge is low or empty. Order a new toner cartridge. You can temporarily improve print quality by redistributing the toner. See page 8.3. To check the remaining toner, see "Web Image Monitor" or print "Configuration page". See page 2.2 in the Network Printer User's Guide or page 8.5 in the User's Guide, respectively.
	Orange	On	• A paper jam has occurred. To solve the problem, see page 9.1.
Online	Green	On	• The printer is in power save mode. • The printer is on-line and can receive data from the computer.
		Blinking	• Blinks slowly indicates that the printer is receiving data from the computer. • Blinks quickly indicates that the printer is printing data.

Finding more information

You can find information for setting up and using your printer from the following resources, either printed or onscreen.
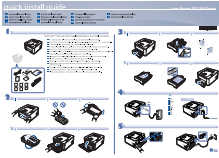
Quick Install Guide	Provides information on setting up your printer, therefore, be sure to follow the instructions in the guide to get the printer ready.
Online User's Guide	Provides you with step-by-step instructions for using your printer's full features, and contains information for maintaining your printer, troubleshooting, and installing accessories. This user's guide also contains a Software Section providing you with information on how to print documents with your printer on various operating systems, and how to use the supplied software utilities. **Note** You can access the user's guides in other languages from the **Manual** folder on the supplied CD-ROM.
Printer Driver Help	Provides you with help information on printer driver properties and instructions for setting up the properties for printing. To access a printer driver help screen, click **Help** from the printer properties dialog box.
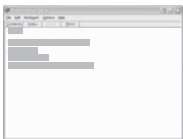
Setting up the hardware

This section shows the steps to set up the hardware which is explained in the Quick Install Guide. Make sure you read Quick Install Guide and complete following steps.

1 Select a stable location.

Select a level, stable place with adequate space for air circulation. Allow extra space to open covers and trays.

The area should be well-ventilated and away from direct sunlight or sources of heat, cold, and humidity. Do not set the machine close to the edge of your desk or table.
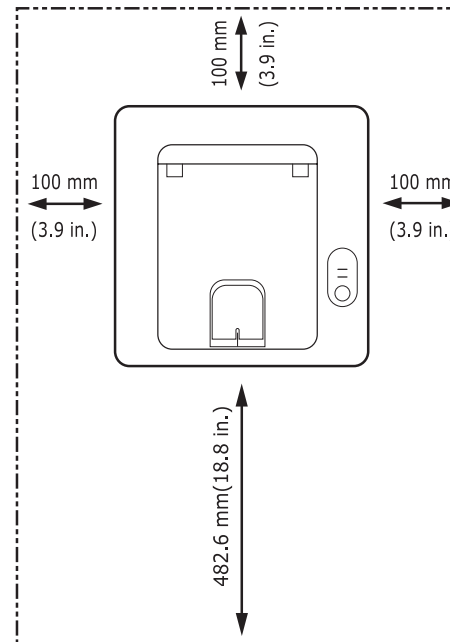
Printing is suitable for altitudes under 1,000 m (3,281 ft). Refer to the altitude setting to optimize your printing. See page 1.5 for more information.

Place the machine on a flat and stable surface for not letting it tilt more than 2 mm (0.08 inches). Otherwise, it may affect the printing quality.
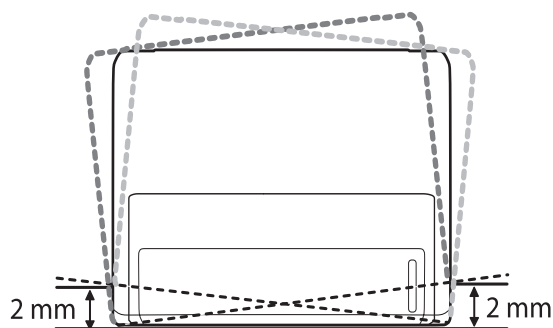
2 Unpack the machine and check all the enclosed items.

3 Remove the tape holding the machine tightly.

4 Install the toner cartridge.

5 Load paper. (See "Loading paper" on page 5.4.)

6 Make sure that all the cables are connected to the machine.

7 Turn the machine on.

> **Notes**
> - When you move the machine, do not tilt or turn it upside down. Otherwise, the inside of the machine may be contaminated by toner, which can cause damage to the machine or bad printing quality.
> - When the printer driver is in the installation process, the driver detects the locale information of your operating system, and sets the paper size for your machine. If you use the different Windows locale, you must change the paper size of your machine for matching your commonly used paper size. Open the printer properties to change the paper size.

Altitude adjustment

The print quality is affected by atmospheric pressure, which is determined by the height of the machine above sea level. The following information will guide you on how to set your machine to the best print quality.

Before you set the altitude value, find the altitude where you are using the machine.
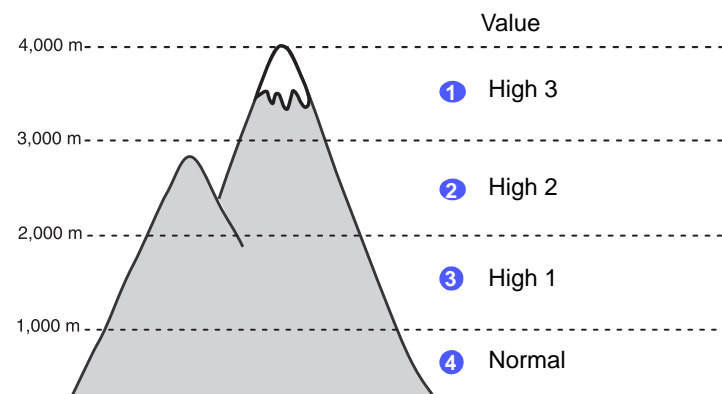
1 Ensure that you have installed the printer driver with the provided supplied CD-ROM.

2 For Windows, from the **Start** menu, select **Programs** or **All Programs** > **SP 3300 Series** > **Printer Settings Utility**.

For MAC OS X, open the **Applications** folder > **RNP** > **SP 3300 Series** > **Printer Settings Utility**.

3 Click **Setting** > **Altitude Adjustment**. Select the appropriate value from the dropdown list, and then click **Apply**.

> **Note**
> If your machine is connected to a network, **Web Image Monitor SP 3300 Series** screen appears automatically. Click **Machine Settings** > **Setup** (or **Machine Setup**) > **Altitude Adj**. Select the appropriate altitude value, and then click **Apply**.

Changing the font setting

Your machine has preset the font for your region or country.

If you want to change the font or set the font for special conditions such as DOS environment, you can change the font setting as follows:

1 Ensure that you have installed the printer driver from the provided supplied CD-ROM.

2 For Windows, from the **Start** menu, select **Programs** or **All Programs** > **SP 3300 Series** > **Printer Settings Utility**.

For MAC OS X, open the **Applications** folder > **RNP** > **SP 3300 Series** > **Printer Settings Utility**.

3 Click **Emulation**.

4 Confirm if PCL is selected in **Emulation Setting**.

5 Click **Setting**.

6 Select your preferred font in the **Symbol set** list.

7 Click **Apply**.

> **Note**
>
> Following information shows the proper font list for corresponding languages.
> - Russian: CP866, ISO 8859/5 Latin Cyrillic
> - Hebrew: Hebrew 15Q, Hebrew-8, Hebrew-7 (Israel only)
> - Greek: ISO 8859/7 Latin Greek, PC-8 Latin/Greek
> - Arabic & Farsi: HP Arabic-8, Windows Arabic, Code Page 864, Farsi, ISO 8859/6 Latin Arabic
> - OCR: OCR-A, OCR-B

2 Basic setup

This chapter includes:

- **Printing a demo page**
- **Using toner save mode**

Printing a demo page

After setting up your printer, print a demo page to make sure that the printer is operating correctly.

Press and hold the **Cancel** button for about 2 seconds.

A demo page prints out.

Using toner save mode

Toner save mode allows the printer to use less toner on each page. Activating this mode extends the life of your toner cartridge and reduces your cost per page beyond what one would experience in the normal mode, but it reduces print quality.

You can set the toner save mode from the printer properties window on your printer driver. See the Software Section.

3 Software overview

This chapter gives you an overview of the software that comes with your printer. Further details about installing and using the software are explained in the Software Section.

This chapter includes:

- **Supplied software**
- **Printer driver features**
- **System requirements**

Supplied software

You must install the printer software using the supplied CD-ROM after you have set up your printer and connected it to your computer.

The CD provides you with the following software:

Contents	
Windows	• **Printer driver**: Use this driver to take full advantage of your printer's features. • **Status Monitor**: This program allows you to monitor the printer's status and alerts you when an error occurs during printing. • **Printer Settings Utility**: This program is automatically installed when you install the Status Monitor. • **PCL6 driver**: Use this driver to print documents in the PCL6, PCL5e language. • **PostScript Printer Description (PPD) file**: Use the PostScript driver to print documents with complex fonts and graphics in the PostScript language. • **Set IP**: Use this program to set your printer's TCP/IP addresses. • **User's Guide** in PDF
Macintosh	• **Printer driver**: Use this driver to run your printer from a Macintosh computer and print documents. • **Printer Settings Utility**: This program allows you to configure various printer settings. • **Set IP**: Use this program to set your printer's TCP/IP addresses.

Printer driver features

Your printer drivers support the following standard features:

- Paper source selection
- Paper size, orientation and type
- Number of copies

In addition, you can use various special printing features. The following table shows a general overview of features supported by your printer drivers:

Feature	PCL 6	PostScript	
	Windows	Windows	Macintosh
Toner save	O	O	O
Print quality option	O	O	O
Poster printing	O	X	X
Multiple pages per sheet (N-up)	O	O	O
Fit to page printing	O	O	O
Scale printing	O	O	O
Watermark	O	X	X
Overlay	O	X	X

System requirements

Before you begin, ensure that your system meets the following requirements:

Windows

Item	Requirements		Recommended
Operating system	Windows 2000/XP/Vista and Windows Server 2003		
CPU	Windows 2000	Pentium II 400 MHz or higher	Pentium III 933 MHz
	Windows XP/ Vista and Windows Server 2003	Pentium III 933 MHz or higher	Pentium IV 1 GHz
RAM	Windows 2000	64 MB or more	128 MB
	Windows XP and Windows Server 2003	128 MB or more	256 MB
	Windows Vista	512 MB or more	1 GB
Free disk space	Windows 2000	600 MB or more	1 GB
	Windows XP and Windows Server 2003	1 GB or more	5 GB
	Windows Vista	15 GB	15 GB or more
Internet Explorer	Windows 2000/ XP and Windows Server 2003	5.0 or higher	
	Windows Vista	7.0 or higher	

Note
- For Windows 2000/XP/Vista and Windows Server 2003, users who have an administrator right can install the software.

Macintosh

Operating system	Requirement (Recommended)		
	CUP	RAM	Free HDD space
Mac OS X 10.4 or lower	• PowerPC G4/G5 • Intel processors	• 128 MB for a PowerPC based MAC (512 MB) • 512 MB for an Intel based MAC (1 GB)	1 GB
Mac OS X 10.5	• 867 MHz or faster PowerPC G4/G5 • Intel processors	512 MB (1 GB)	1 GB

4 Network setup (SP 3300DN only)

This chapter gives you basic information for setting up your printer for network connections.

This chapter includes:

- **Introduction**
- **Supported operating systems**
- **Using SetIP program**

Introduction

Once you have connected your printer to a network with an RJ-45 Ethernet cable, you can share the printer with other network users.

You need to set up the network protocols on the printer to use it as your network printer. Protocols can be set up by the following programs:

- **Web Image Monitor SP 3300 Series**: A web server embedded to your network print server, which allows you to configure the network parameters necessary for the printer to connect to various network environments.
- **SetIP**: A utility program allowing you to select a network interface and manually configure the addresses for use with the TCP/IP protocol. This program is on the supplied CD-ROM that comes with your printer.

Supported operating systems

The following table shows the network environments supported by the printer:

Item	Requirements
Network interface	• 10/100 Base-TX
Network operating system	• Windows 2000/XP (32/64 bit)/Vista and Windows Server 2003 • Mac OS 8.6~9.2, 10.1~10.5
Network protocols	• TCP/IP • EtherTalk • HTTP 1.1 • SNMP • Bonjour
Dynamic addressing server	• DHCP, BOOTP

• TCP/IP: Transmission Control Protocol/Internet Protocol
• DHCP: Dynamic Host Configuration Protocol
• BOOTP: Bootstrap Protocol

Using SetIP program

This program is for the network IP setting using the MAC address which is the hardware serial number of the network printer card or interface. Especially, it is for the network administrator to set several network IPs at the same time.

> **Note**
> If you want to setup DHCP network protocol, go to the http://developer.apple.com/networking/bonjour/download/, select the program Bonjour for Windows due to your computer operating system, and install the program. This program will allow you to fix the network parameter automatically. Follow the instruction in the installation window.

1 Insert the supplied CD-ROM provided along with your machine.

2 Start Windows Explorer and open the X drive. (X represents your CD-ROM drive.)

3 Double click **Application** > **SetIP**.

4 Open the language folder you want to use.

5 Double click **Setup.exe** to install this program.

6 From the Windows Start menu, select **Programs** > **SP 3300 Series** > **Set IP**.

7 Select the name of your printer and click " ⚙ ".

> **Note**
> If you cannot find your printer name click " ↻ " to refresh the list.

8 Enter the network card's MAC address, IP address, subnet mask, default gateway, and then click **Apply**.

> **Note**
> If you do not know the network card's MAC address, print the machine's network information report.

9 Click **OK** to confirm the settings.

10 Click **Exit** to close the SetIP program.

5 Loading print media

This chapter will help you understand the types of paper you can use with your printer and how to properly load paper in the different paper trays for the best print quality.

This chapter includes:

- **Selecting print media**
- **Loading paper**
- **Knowing an output location**

Selecting print media

You can print on a variety of print media, such as plain paper, envelopes, labels, and transparencies. Always use print media that meet the guidelines for use with your printer. Print media that does not meet the guidelines outlined in this user's guide may cause the following problems:

- Poor print quality
- Increased paper jams
- Premature wear on the machine.

Properties, such as weight, composition, grain, and moisture content, are important factors that affect the machine's performance and the output quality. When you choose print materials, consider the following:

- The type, size and weight of the print media for your machine are described later in this section.
- Desired outcome: The print media you choose should be appropriate for your project.
- Brightness: Some print media are whiter than others and produce sharper, more vibrant images.
- Surface smoothness: The smoothness of the print media affects how crisp the printing looks on the paper.

Notes

- Using print media that does not meet these specifications may cause problems, requiring repairs. Such repairs are not covered by the warranty or service agreements.
- Some print media may meet all of the guidelines in this section and still not produce satisfactory results. This may be the result of improper handling, unacceptable temperature and humidity levels, or other variables over which manufacturer has no control.
- Before purchasing large quantities of print media, ensure that it meets the requirements specified in this user's guide.

Supported sizes of paper

Type	Size	Dimensions	Weight[a]	Capacity[b]
Plain paper	Letter	216 x 279 mm (8.5 x 11 inches)	• 60 to 105 g/m^2 (16 to 24 lb bond) for the tray • 60 to 163 g/m^2 (16 to 43 lb bond) for the manual feed	• 250 sheets of 75 g/m^2 (20 lb bond) paper for the tray • 1 sheet in the manual tray
	Legal	216 x 356 mm (8.5 x 14 inches)		
	Folio	216 x 330.2 mm (8.5 x 13 inches)		
	Oficio	216 x 343 mm (8.5 x 13.5 inches)		
	A4	210 x 297 mm (8.26 x 11.69 inches)		
	JIS B5	182 x 257 mm (7.18 x 10.12 inches)		
	ISO B5	176 x 250 mm (6.93 x 9.84 inches)		
	Executive	184 x 267 mm (7.25 x 10.5 inches)		
	A5	148 x 210 mm (5.82 x 8.26 inches)		
	A6	105 x 148 mm (4.13 x 5.82 inches)		
Envelope	Envelope B5	176 x 250 mm (6.93 x 9.84 inches)	75 to 90 g/m^2 (20 to 24 lb)	1 sheet in the manual tray
	Envelope Monarch	98.4 x 190.5 mm (3.88 x 7.5 inches)		
	Envelope COM-10	105 x 241 mm (4.12 x 9.5 inches)		
	Envelope DL	110 x 220 mm (4.33 x 8.66 inches)		
	Envelope C5	162 x 229 mm (6.38 x 9.02 inches)		
	Envelope C6	114 x 162 mm (4.49 x 6.38 inches)		
Transparency	Letter, A4	Refer to the Plain paper section	138 to 146 g/m^2 (37 to 39 lb)	1 sheet in the manual tray
Labels	Letter, Legal, Folio, Oficio, A4, JIS B5, ISO B5, Executive, A5, A6	Refer to the Plain paper section	120 to 150 g/m^2 (32 to 40 lb)	1 sheet in the manual tray
Card stock	Letter, Legal, Folio, Oficio, A4, JIS B5, ISO B5, Executive, A5, A6	Refer to the Plain paper section	60 to 163 g/m^2 (16 to 43 lb)	1 sheet in the manual tray
Minimum size (custom)		76 x 127 mm (3.86 x 5.83 inches)	60 to 163 g/m^2 (16 to 43 lb bond)	1 sheet in the manual tray
Maximum size (custom)		215.9 x 356 mm (8.5 x 14 inches)		

a. If media weight is over 24 lb (90 g/m^2), use the manual feed.
b. Maximum capacity may differ depending on media weight, thickness, and environmental conditions.

Print media for duplex printing

Type	Size	Weight
Plain paper, Recycled paper	A4, Letter, Oficio, Legal, and Folio	75 ~ 90 g/m^2 (20 to 24 lb)

Guidelines for selecting and storing print media

When selecting or loading paper, envelopes, or other print media, keep these guidelines in mind:

- Always use print media that conform with the specifications listed on the next column.

- Attempting to print on damp, curled, wrinkled, or torn paper can cause paper jams and poor print quality.

- For the best print quality, use only high quality copier grade paper specifically recommended for use in laser printers.

- Avoid using the following print media types:
  - Paper with embossed lettering, perforations, or a texture that is too smooth or too rough
  - Erasable bond paper
  - Multi-paged paper
  - Synthetic paper and thermally reactive paper
  - Carbonless paper and Tracing paper.

- Use of these types of paper could result in paper jams, chemical smells, and damage to your printer.

- Store print media in its ream wrapper until you are ready to use it. Place cartons on pallets or shelves, not on the floor. Do not place heavy objects on top of the paper, whether it is packaged or unpackaged. Keep it away from moisture or other conditions that can cause it to wrinkle or curl.

- Store unused print media at temperatures between 15 and 30°C (59 to 86°F). The relative humidity should be between 10 and 70%.

- Store unused print media in a moisture-proof wrap, such as a plastic container or bag, to prevent dust and moisture from contaminating your paper.

- Load special print media types one sheet at a time through the manual tray to avoid paper jams.

- To prevent print media, such as transparencies and label sheets, from sticking together, remove them as they print out.

Note

- If you print 20 envelopes in succession, the surface of the top cover may become hot. Please exercise caution.

Guidelines for special print media

Type	Guidelines
Envelopes	• Successful printing on envelopes depends upon the quality of the envelopes. When selecting envelopes, consider the following factors: - Weight: The weight of the envelope paper should not exceed 90 g/m² (24 lb) or jamming may occur. - Construction: Prior to printing, envelopes should lie flat with less than 6 mm (0.25 inches) curl, and should not contain air. - Condition: Envelopes should not be wrinkled, nicked, or otherwise damaged. - Temperature: You should use envelopes that are compatible with the heat and pressure of the printer during operation. • Use only well-constructed envelopes with sharp and well creased folds. • Do not use stamped envelopes. • Do not use envelopes with clasps, snaps, windows, coated lining, self-adhesive seals, or other synthetic materials. • Do not use damaged or poorly made envelopes. • Be sure the seam at both ends of the envelope extends all the way to the corner of the envelope. Acceptable Unacceptable • Envelopes with a peel-off adhesive strip or with more than one flap that folds over to seal must use adhesives compatible with the printer's fusing temperature for 0.1 second. Check your machine's specification to view the fusing temperature, see page 11.1. The extra flaps and strips might cause wrinkling, creasing, or jams, and may even damage the fuser. • For the best print quality, position margins no closer than 15 mm (0.6 inches) from the edges of the envelope. • Avoid printing over the area where the envelope's seams meet.

| Type	Guidelines
Transparencies	• To avoid damaging the printer, use only transparencies designed for use in laser printers. • Transparencies used in the printer must be able to withstand the machine's fusing temperature. Check your machine's specification to view the fusing temperature, see page 11.1. • Place them on a flat surface after removing them from the printer. • Do not leave them in the paper tray for long periods of time. Dust and dirt may accumulate on them, resulting in spotty printing. • To avoid smudging caused by fingerprints, handle them carefully. • To avoid fading, do not expose printed transparencies to prolonged sunlight. • Ensure that transparencies are not wrinkled, curled, or have any torn edges.
Labels	• To avoid damaging the printer, use only labels designed for use in laser printers. • When selecting labels, consider the following factors: - Adhesives: The adhesive material should be stable at 180° C (356° F), the printer's fusing temperature. - Arrangement: Only use labels with no exposed backing between them. Labels can peel off sheets that have spaces between the labels, causing serious jams. - Curl: Prior to printing, labels must lie flat with no more than 13 mm (5 inches) of curl in any direction. - Condition: Do not use labels with wrinkles, bubbles, or other indications of separation. • Make sure that there is no exposed adhesive material between labels. Exposed areas can cause labels to peel off during printing, which can cause paper jams. Exposed adhesive can also cause damage to printer components. • Do not run a sheet of labels through the printer more than once. The adhesive backing is designed for only a single pass through the printer. • Do not use labels that are separating from the backing sheet or are wrinkled, bubbled, or otherwise damaged.
Card stock or custom-sized materials	• Do not print on print media smaller than 76 mm (3 inches) wide or 127 mm (5 inches) long. • In the software application, set margins at least 6.4 mm (0.25 inches) away from the edges of the material.

Type	Guidelines
Preprinted paper	• Letterhead must be printed with heat-resistant ink that will not melt, vaporize, or release hazardous emissions when subjected to the printer's fusing temperature for 0.1 second. Check your machine's specification to view the fusing temperature, see page 11.1. • Letterhead ink must be non-flammable and should not adversely affect printer rollers. • Forms and letterhead should be sealed in a moisture-proof wrapping to prevent changes during storage. • Before you load preprinted paper, such as forms and letterhead, verify that the ink on the paper is dry. During the fusing process, wet ink can come off preprinted paper, reducing print quality.

Loading paper

Load the print media you use for the majority of your print jobs in the tray 1. The tray 1 can hold a maximum of 250 sheets of 75 g/m^2 (20 lb) plain paper.

You can purchase an optional tray (tray 2) and attach it below the standard tray to load an additional 250 sheets of paper.

The paper level indicator on the front of the tray 1 and the optional tray 2 shows the amount of paper currently left in the tray. When the tray is empty, the indicator of the bar is completely lowered.


Full ▲   ▲ Empty
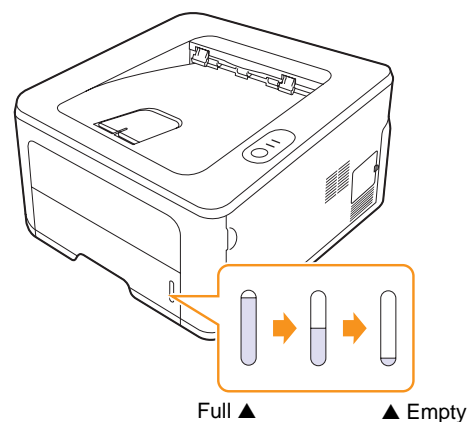
Using the tray 1 or the optional tray 2

Use the print material you use for the majority of your print jobs in the tray 1. The tray 1 can hold a maximum of 250 sheets of 75 g/m^2 (20 lb) paper.

You can purchase an optional tray 2 and attach it below the tray 1 to load an additional 250 sheets of paper.

To load paper, pull open the tray and load paper with the side to be printed on face down.
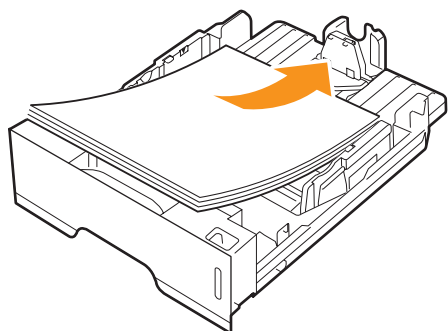
You can load letterhead paper with the design side face down. The top edge of the sheet with the logo should be placed at the front of the tray.
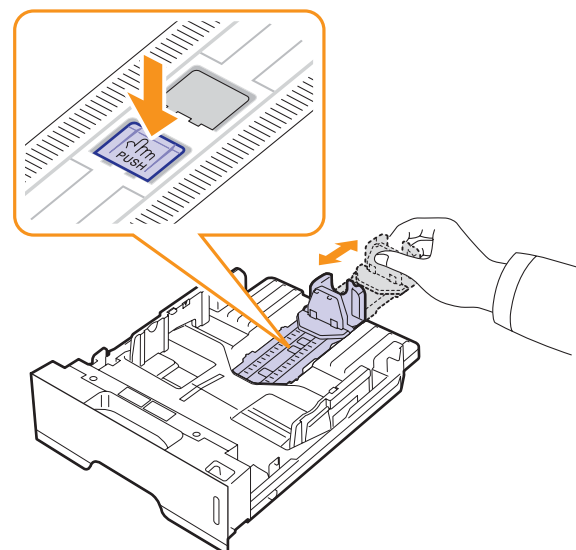
> **Notes**
> - If you experience problems with paper feed, place one sheet at a time in the manual feed.
> - You can load previously printed paper. The printed side should be facing up with an uncurled edge at the front. If you experience problems with paper feed, turn the paper around. Note that the print quality is not guaranteed.

## Changing the size of the paper in the tray 1

To load longer sizes of paper, such as Legal-sized paper, you need to adjust the paper guides to extend the paper tray.
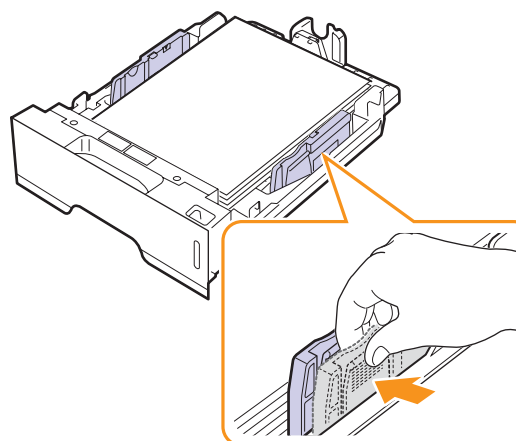
1	paper length guide
2	support guide
3	guide lock
4	paper width guides
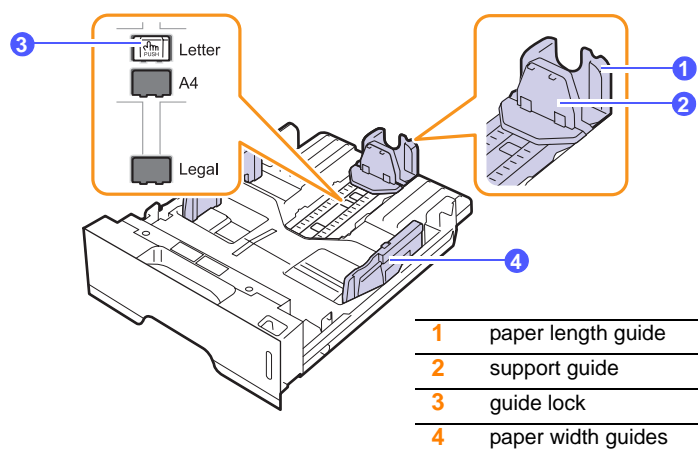
1 Press and hold the guide lock, and slide the paper length guide to locate it in the correct paper size slot.

2 After inserting paper into the tray, adjust the support guide so that it lightly touches the paper stack.
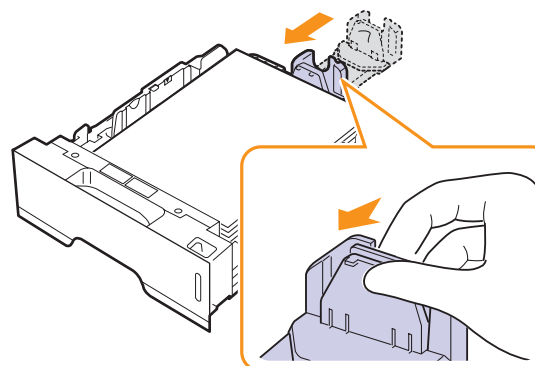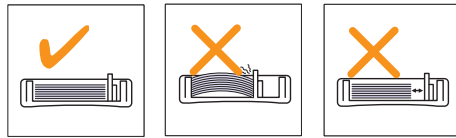
3 Squeeze the paper width guides, as shown and slide them to the stack of paper until it lightly touches the side of the stack.
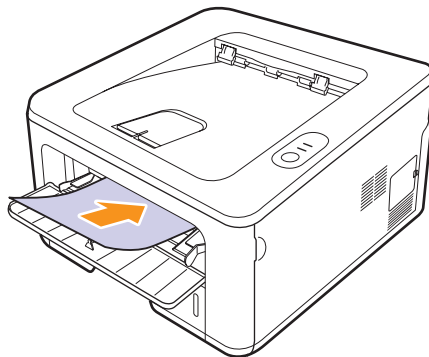
Using manual feeder

You can manually load a sheet of print media in the manual tray if you select Manual Feeder in the Source option from the Paper tab when you change print settings to print a document. See the Software Section. Manually loading paper can be helpful when you want to check the print quality after each page is printed.

Load paper sheet-by-sheet in the manual tray, send print data to print the first page, and press the **Cancel** button on the control panel to print each following page.
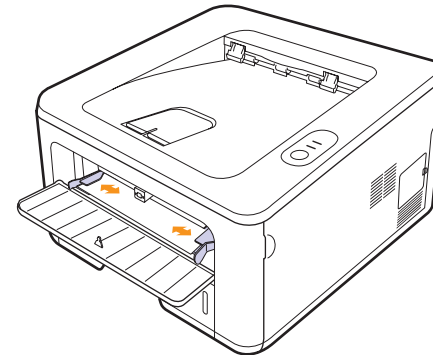
1 Open the manual feed.
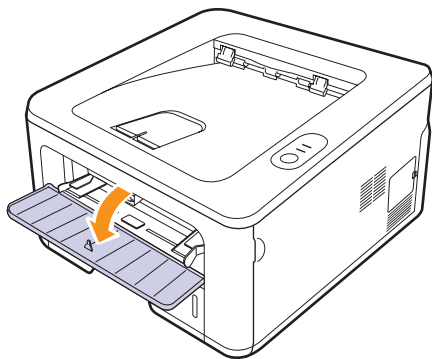
2 Load the paper **with the side to be printed on facing up**.

3 Adjust the manual tray paper width guides to the width of the paper. Do not force too much, or the paper will bend, which could result in a paper jam or skew.

4 When you print a document, set the paper source to Manual Feeder and select the appropriate paper size and type in the software application. See the Software Section.

5 Print a document.

6 Press the **Cancel** button.

The printer picks up the print media and prints.

Note

- If you do not press the **Cancel** button, after a pause the printer will automatically pick the print media.

7 Insert the next sheet into the manual tray and press the **Cancel** button.
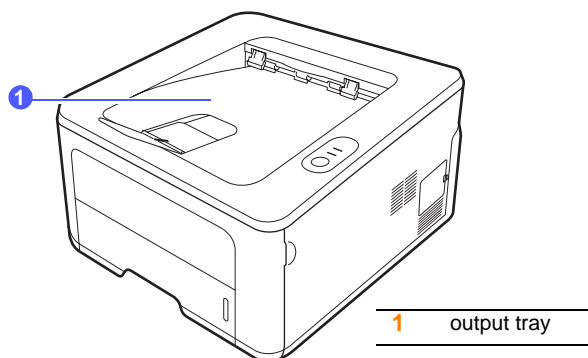
Repeat this step for every page to be printed.

Note

- If envelopes or thick papers(163g/m2) are printed out with wrinkles, crease or black bold lines, open the rear cover and pull the guide of both sides down. Keep the rear cover opened during printing.
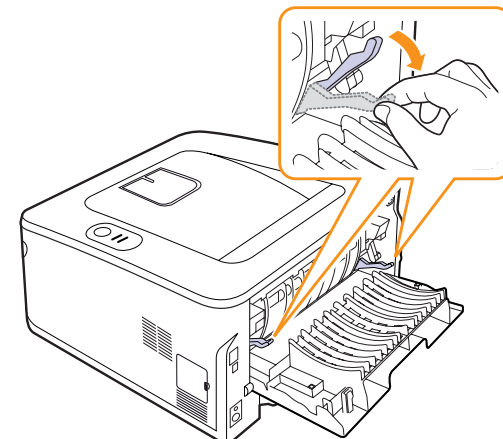
Knowing an output location

1	output tray

The output tray collects paper face down, in the order in which the sheets were printed.

Notes

- If you continuously print many pages, the surface of the output tray may become hot. Be careful not to touch the surface, and especially keep children away from the surface.
- The output tray can hold up to 150 sheets of 75 g/m^2 (20 lb) plain paper. Remove the pages so that the tray is not overloaded.
- If the printed paper is not stacked properly, turn over the stack of paper in the tray.

6 Basic printing

This chapter explains common printing tasks.

This chapter includes:

- **Printing a document**
- **Canceling a print job**

Printing a document

This printer allows you to print from various Windows and Macintosh applications. The exact steps for printing a document may vary depending on the application you use.

For details about printing, see the Software Section.

Canceling a print job

If the print job is waiting in a print queue or print spooler, such as the printer group in Windows, delete the job as follows:

1 Click the Windows **Start** button.

2 For Windows 2000, select **Settings** and then **Printers**.

For Windows XP (32/64 bit) and Windows Server 2003, select **Printers and Faxes**.

For Windows Vista, select **Control Panel** > **Hardware and Sound** > **Printers**.

3 Double-click the **SP 3300 Series** icon.

4 From the **Document** menu, select **Cancel**.

> **Note**
> - You can access this window simply by double-clicking the printer icon at the bottom right corner of the Windows desktop.

You can also cancel the current job by pressing the **Cancel** button on the control panel of your printer.

7 Supplies and accessories

This chapter provides information on the toner cartridge and accessory that are available for your printer.

This chapter includes:

- **Toner cartridge**
- **Accessory**

Toner cartridge

When the toner runs out, you can order the following type of toner cartridge for your printer:

Toner yield: Approx. 5,000 pages[1].

Accessory

You can purchase and install the following accessory to your printer:

Accessory	Description
Optional Tray	If you are experiencing frequent paper supply problems, you can attach additional 250 sheet tray. You can print documents on various sizes and types of print media.
Memory DIMM	The memory board is installed on the main controller board inside the machine. When you add the optional memory board, it increases print performance.
	The machine has 32 MB of standard memory and a slot for optional additional memory. The memory can be expanded by installing an optional memory (128 MB).

---

1 Declared yield value in accordance with ISO/IEC 19752.

8 Maintenance

This chapter provides information for maintaining your printer and the toner cartridge.

This chapter includes:

- **Cleaning the printer**
- **Maintaining the toner cartridge**
- **Printing a configuration page**
- **Maintenance parts**

Cleaning the printer

During the printing process, paper, toner, and dust particles can accumulate inside the printer. This buildup can cause print quality problems, such as toner specks or smearing.
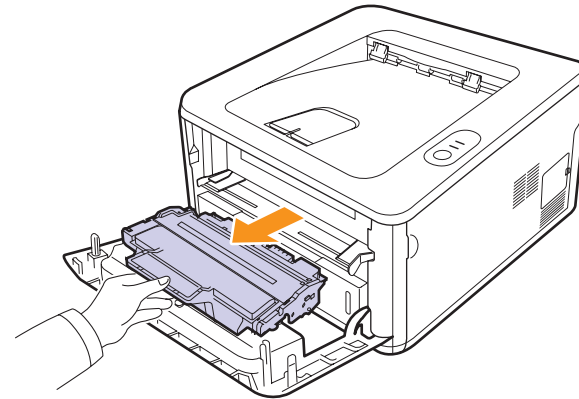
> **Notes**
> - Cleaning the cabinet of the printer with cleaning materials containing large amounts of alcohol, solvents, or other strong substances can discolor or crack the cabinet.
> - If your machine or its around is contaminated with toner, we recommend you to use cloth or tissue dampened with water to clean it. If you use a vacuum cleaner, toner blows in the air and might be harmful for you.

Cleaning the outside of the printer

Clean the cabinet of the printer with a soft, lint-free cloth. You can dampen the cloth slightly with water, but be careful not to let any water drip onto or into the printer.
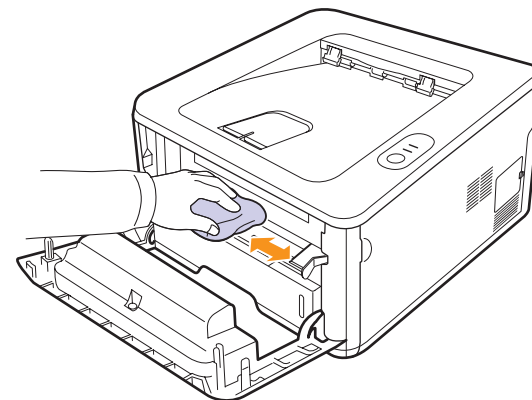
Cleaning the inside of the printer

1   Turn the printer off and unplug the power cord. Wait for the printer to cool down.

2   Open the front cover and pull the toner cartridge out. Set it on a clean flat surface.


> **Notes**
> - To prevent damage to the toner cartridge, do not expose it to light for more than a few minutes. Cover it with a piece of paper, if necessary.
> - Do not touch the green surface underside of the toner cartridge. Use the handle on the cartridge to avoid touching this area.

3   With a dry lint-free cloth, wipe away any dust and spilled toner from the toner cartridge area and the toner cartridge cavity.

> **Note**
> - While cleaning the inside of the printer, be careful not to reach too far into the printer. The fuser area may be hot.

**4** Gently swab the long strip of glass (LSU) inside the top of the cartridge and check for dirt or dust.
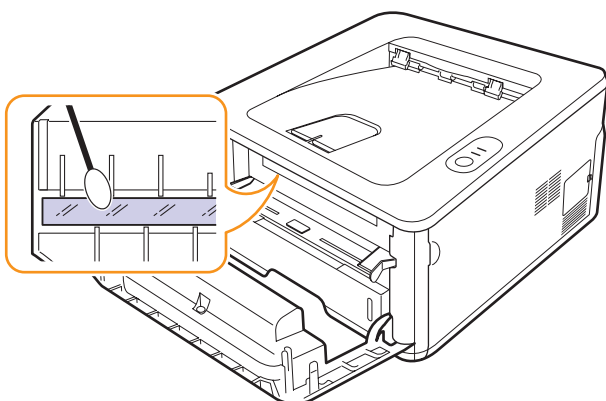
Note
• The long strip of glass is hard to locate.

5 Hold the toner cartridge by the handle and slowly insert the cartridge into the opening in the printer.

Tabs on the sides of the cartridge and corresponding grooves within the printer will guide the cartridge into the correct position until it locks into place completely.
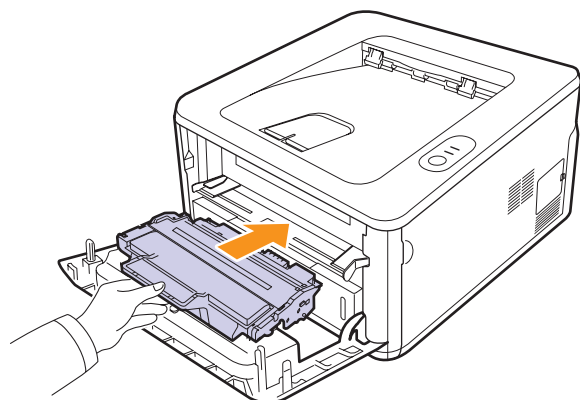
6 Close the front cover. Make sure that the cover is securely closed.

7 Plug in the power cord and turn the printer on.

Maintaining the toner cartridge

Warning
• Do not incinerate used toner or toner containers. Toner dust might ignite when exposed to an open flame.
• Disposal can take place at our authorized dealer.
• Dispose of used toner containers in accordance with local regulations.
• Do not store toner, used toner, or toner containers in a place with an open flame. The toner might ignite and cause burns of a fire.

Caution
• Keep toner (used or unused) and toner cartridge out of reach of children.
• If toner or used toner is inhaled, gargle with plenty of water and move into a fresh air environment. Consult a doctor if necessary.
• If toner or used toner gets into your eyes, flush thoroughly with eyewash or water. Consult a doctor if necessary.
• If toner or used toner is swallowed, dilute by drinking a large amount of water. Consult a doctor if necessary.
• Avoid getting toner on your clothes or skin when removing a paper jam or replacing toner. If your skin comes into contact with toner, wash the affected area thoroughly with soap and water.
• If toner gets on your clothing, wash with cold water. Hot water will set the toner into the fabric and may make removing the stain impossible.

Toner cartridge storage

To get the most from the toner cartridge, keep the following guidelines in mind:

• Do not remove the toner cartridge from its package until ready for use.

• Do not refill the toner cartridge. The printer warranty does not cover damage caused by using a refilled cartridge.

• Store toner cartridge in the same environment as the printer.

• To prevent damage to the toner cartridge, do not expose it to light for more than a few minutes.

Expected cartridge life

The life of the toner cartridge depends on the amount of toner that print jobs require. The actual number may also be different depending on the print density of the pages you print on, and the number of pages may be affected by operating environment, printing interval, media type, and media size. If you print a lot of graphics, you may need to change the cartridge more often.

Redistributing toner cartridge

When the toner cartridge is near the end of its life span:

- White streaks and light printing occur.
- The Status Monitor program window appears on the computer.
- The **Alert** LED blinks red.

If this happens, you can temporarily reestablish print quality by redistributing the remaining toner in the cartridge. In some cases, white streaks or light printing will still occur even after you have redistributed the toner.

1 Open the front cover.

2 Pull the toner cartridge out.
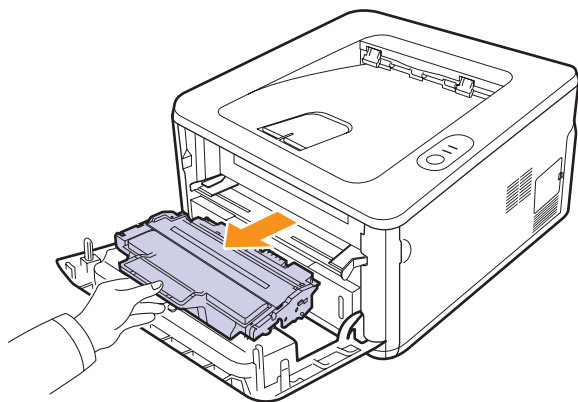
Notes
- Avoid reaching too far into the printer. The fuser area may be hot.
- To prevent damage to the toner cartridge, do not expose it to light for more than a few minutes. Cover it with a piece of paper, if necessary.
- Do not touch the green surface underside of the toner cartridge. Use the handle on the cartridge to avoid touching this area.

3 Thoroughly shake the cartridge 5 or 6 times to distribute the toner evenly inside the cartridge.
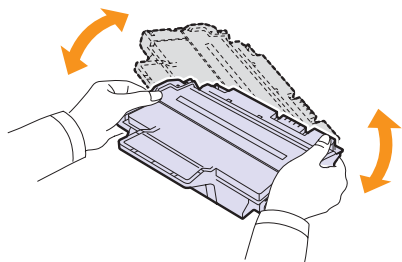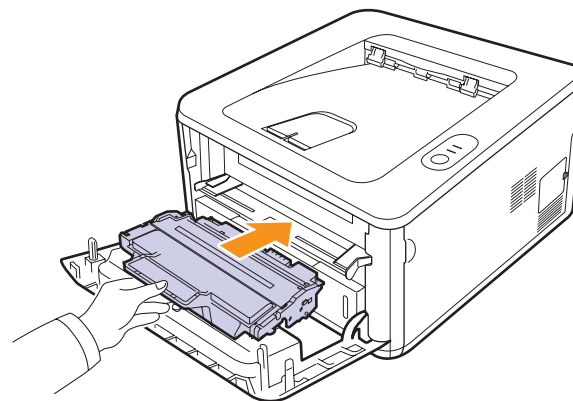

Note
- If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into fabric.

4 Hold the toner cartridge by the handle and slowly insert the cartridge into the opening in the printer.

Tabs on the sides of the cartridge and corresponding grooves within the printer will guide the cartridge into the correct position until it locks into place completely.

5 Close the front cover. Make sure that the cover is securely closed.

Note
- At this stage, if you need to replace the toner cartridge, see page 8.4.

Replacing the toner cartridge

⚠ **Warning**
- Do not incinerate used toner or toner containers. Toner dust might ignite when exposed to an open flame.
- Disposal can take place at our authorized dealer.
- Dispose of used toner containers in accordance with local regulations.

⚠ **Caution**
- Keep toner (used or unused) and toner cartridge out of reach of children.

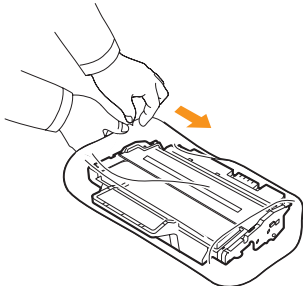When the toner is completely empty or the toner cartridge reached the end of its life span:

- The printer stops printing.
- The Status Monitor program window appears on the computer.
- The **Alert** LED blinks red.

At this stage, the toner cartridge needs to be replaced.

1 Open the front cover.
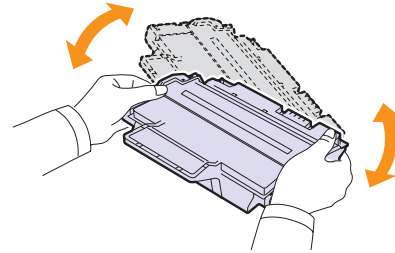
2 Pull the old toner cartridge out.
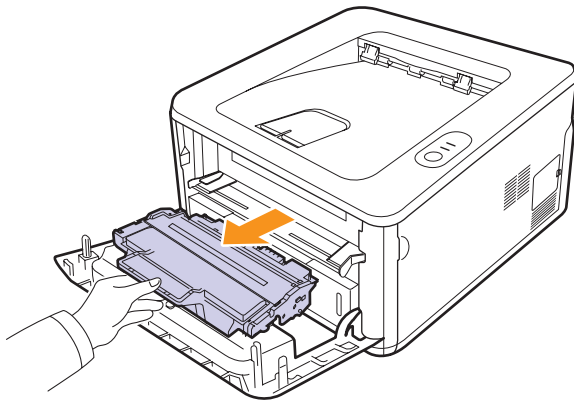
**3** Remove the new toner cartridge from its bag.

📓 **Note**
- Do not use sharp objects, such as a knife or scissors, to open the toner cartridge package. They might scratch the drum of the cartridge.

4 Thoroughly shake the cartridge 5 or 6 times to distribute the toner evenly inside the cartridge.

Thoroughly shake the cartridge to assure maximum copies per cartridge.

**5** Remove the paper protecting the toner cartridge by pulling the packing tape.
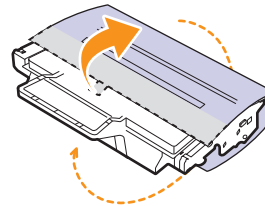
📓 **Note**
- Refer to the helpful pictures on the cartridge wrapping paper.
- If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into fabric.
- To prevent damage to the toner cartridge, do not expose it to light for more than a few minutes. Cover it with a piece of paper, if necessary.
- Do not touch the green surface underside of the toner cartridge. Use the handle on the cartridge to avoid touching this area.

6 Hold the toner cartridge by the handle and slowly insert the cartridge into the opening in the printer.

Tabs on the sides of the cartridge and corresponding grooves within the printer will guide the cartridge into the correct position until it locks into place completely.
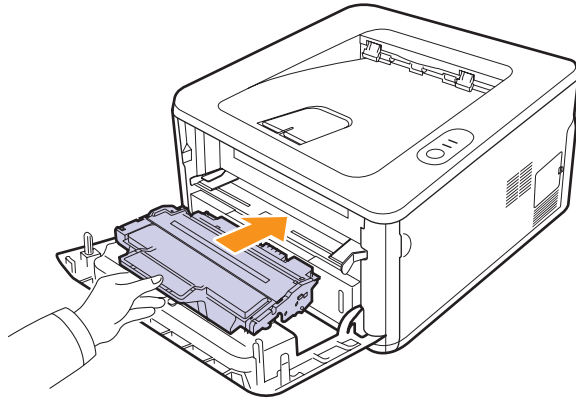
7 Close the front cover. Make sure that the cover is securely closed.

Printing a configuration page

You can print a configuration page to view current printer settings, or to help troubleshoot printer problems.

Press and hold the **Cancel** button for about 5 seconds.

A configuration page prints out.

Maintenance parts

To avoid print quality and paper feed problems resulting from worn parts and to maintain your machine in top working condition the following items will need to be replaced at the specified number of pages or when the life span of each item has expired.

Items	Yield (Average)
Transfer roller	Approx. 50,000 pages
Fuser unit	Approx. 50,000 pages
Pick-up roller	Approx. 50,000 pages

We highly recommends that an authorized service provider, dealer or the retailer where you bought printer performs this maintenance activity. The warranty does not cover the replacement of the maintenance parts after their lifespan.

The warranty does not cover the replacement of the maintenance parts after their lifespan.

9 Troubleshooting

This chapter provides helpful information for what to do if you encounter an error while using your printer.

This chapter includes:

- **Clearing paper jams**
- **Troubleshooting checklist**
- **Solving general printing problems**
- **Solving print quality problems**
- **Common Windows problems**
- **Common PostScript problems**
- **Common Macintosh problems**

Clearing paper jams

> **Note**
> • When removing paper that is jammed in the printer, if possible always pull the paper in the direction that it normally moves so as not to damage internal components. Always pull firmly and evenly; do not jerk the paper. If the paper tears, ensure that all fragments of paper are removed; otherwise a jam will occur again.

When a paper jam occurs, the **Alert** LED lights orange. Open and close the front cover. The jammed paper automatically exits the printer.
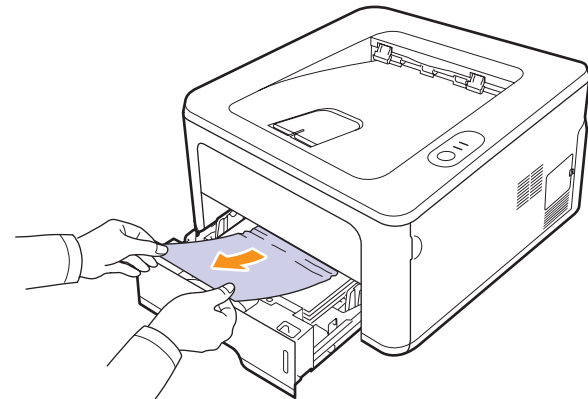
In the paper feed area

In the tray 1

1 Pull the tray 1 open.
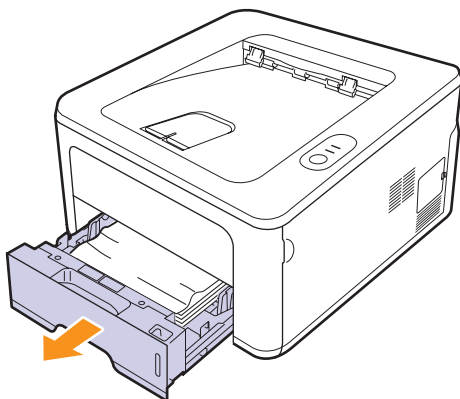
2 Remove the jammed paper by gently pulling it straight out. Make sure that all of the paper is properly aligned in the tray 1.
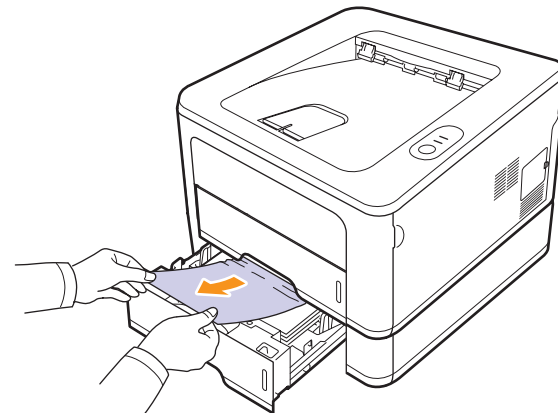

If the paper does not move when you pull, or if you do not see the paper in this area, check the fuser area around the **toner cartridge**. See page 9.2.

3 Insert the tray 1 into the printer until it snaps into place. Printing automatically resumes.

In the optional tray 2

1 Pull the optional tray 2 open.

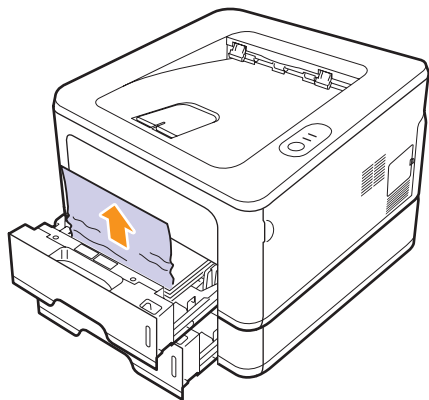**2** Remove the jammed paper from the printer.

If the paper does not move when you pull, or if you do not see the paper in this area, stop and go to step 3.
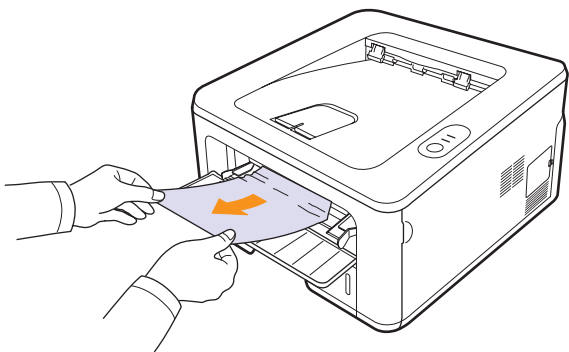
3 Pull the tray 1 half.

4 Pull the paper straight up and out.

5 Insert the trays back into the printer. Printing automatically resumes.

In the manual tray

1 Remove the jammed paper from the printer.

2 Open and close the front cover.

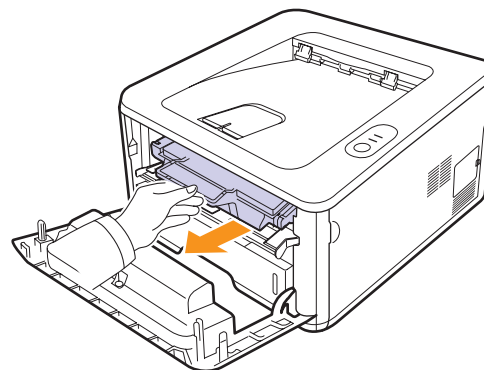**3** Load a paper into the manual feeder, then the printer resumes.

Around the toner cartridge

> **Note**
>
> The fuser area is hot. Take care when removing paper from the printer.

1 Open the front cover and pull the **toner cartridge** out.

> **Notes**
>
> • To prevent damage to the toner cartridge, do not expose it to light for more than a few minutes. Cover it with a piece of paper, if necessary.
>
> • Do not touch the green surface underside of the toner cartridge. Use the handle on the cartridge to avoid touching this area.

2 Remove the jammed paper by gently pulling it straight out.
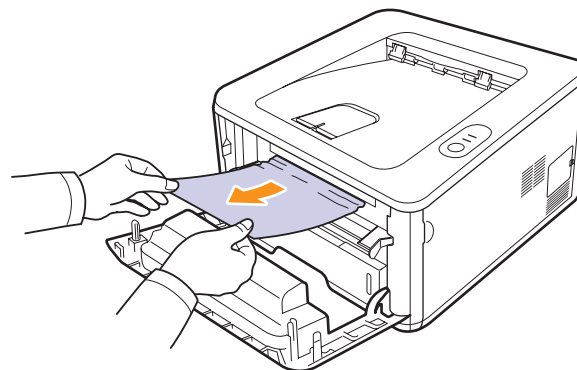
3 Replace the toner cartridge and close the front cover. Printing automatically resumes.

In the paper exit area

⚠ **Caution**
 • The inside of the machine could be very hot. Do not touch the parts with a label indicating "hot surface". Otherwise an injury might occur.
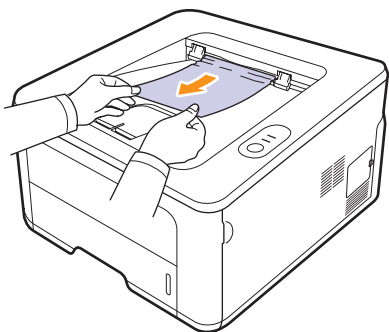
1 Open and close the front cover. The jammed paper is automatically ejected from the printer.

2 Gently pull the paper out of the output tray.

If you do not see the jammed paper or if there is any resistance when you pull, stop and go to the next step.

3 Open the rear cover.

4 Pull the guide rear on each side down and remove the paper. Return the guide rear to its original position.

1	guide rear
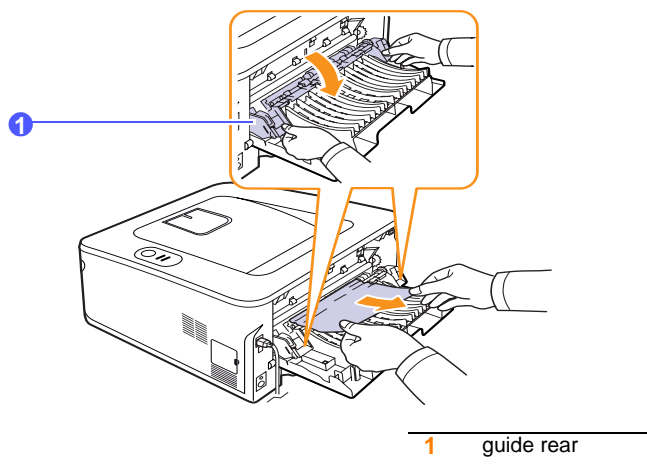
5 Close the rear cover. Printing automatically resumes.

In the duplex unit area

If the duplex unit is not inserted correctly, paper jam may occur. Make sure that the duplex unit is inserted correctly.

Duplex jam 0

1 Pull the duplex unit out of the printer.

1	duplex unit

2 Remove the jammed paper from the duplex unit.

If the paper does not come out with the duplex unit, remove the paper from the bottom of the printer.

Duplex jam 1

1 Open the rear cover.

2 Pull the guide rear on each side down and remove the paper. Return the guide rear to its original position.

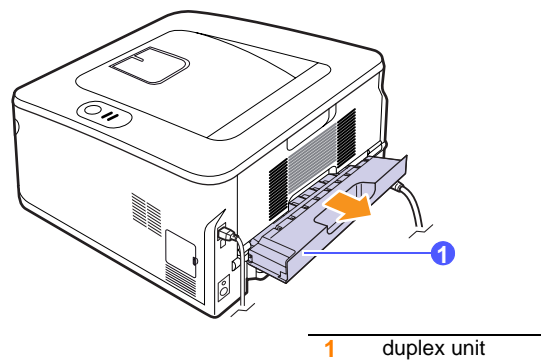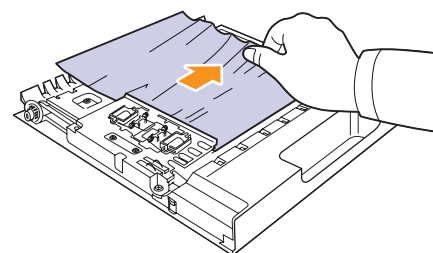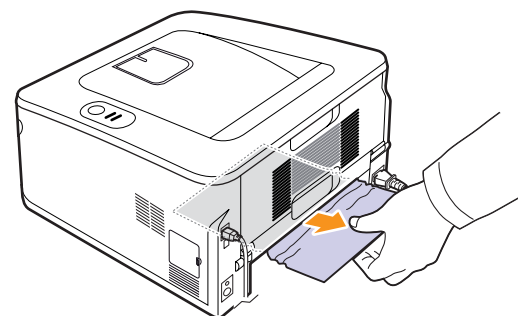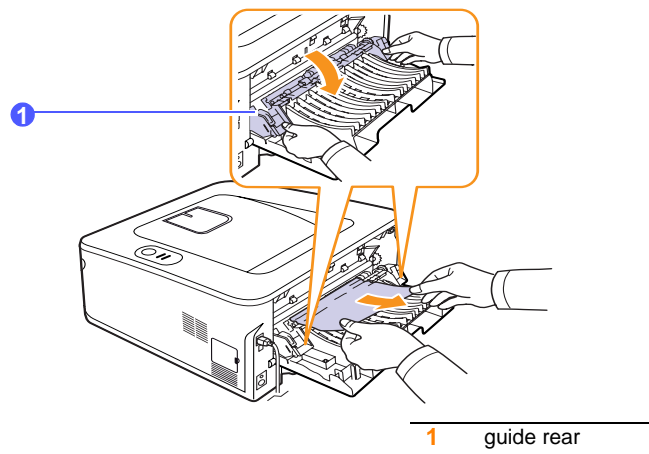| 1	guide rear

3 Close the rear cover. Printing automatically resumes.

Tips for avoiding paper jams

By selecting the correct media types, most paper jams can be avoided. When a paper jam occurs, follow the steps outlined on 9.1.

- Follow the procedures on 5.5. Ensure that the adjustable guides are positioned correctly.
- Do not overload the tray. Ensure that the paper level is below the paper capacity mark on the inside wall of the tray.
- Do not remove paper from the tray while your printer is printing.
- Flex, fan, and straighten paper before loading.
- Do not use creased, damp, or highly curled paper.
- Do not mix paper types in a tray.
- Use only recommended print media. See 5.1.
- Ensure that the recommended print side of print media is facing down in the tray, or facing up in the manual tray.
- If paper jams occur frequently when you print on A5-sized paper:

Load the paper into the tray with the long edge facing the front of the tray.
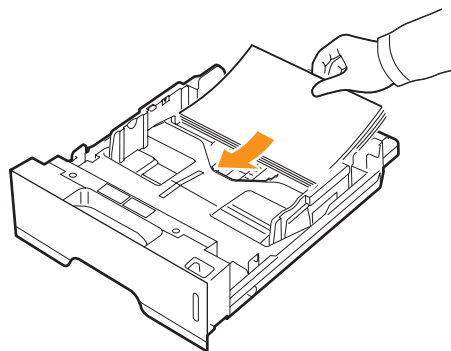
In the printer properties window, set the page orientation to be rotated 90 degrees. See the Software Section.

Troubleshooting checklist

If the printer is not working properly, consult the following checklist. If the printer does not pass a step, follow the corresponding suggested solutions.

Condition	Suggested solutions
Make sure that the **Online** LED on the control panel lights green.	• If the **Online** LED is off, check the power cord connection. Check the power switch. Check the power source by plugging the power cord into another outlet.
Print a demo page to verify that the printer is feeding paper correctly. See page 2.1.	• If a demo page does not print, check the paper supply in the tray. • If the paper jams in the printer, see page 9.1.
Check the demo page to see if it printed correctly.	If there is a print quality problem, see page 9.7.
Print a short document from a software application to verify that the computer and printer are connected and are communicating correctly.	• If the page does not print, check the cable connection between the printer and the computer. • Check the print queue or print spooler to see if the printer has been paused. • Check the software application to ensure that you are using the proper printer driver and communication port. If the page is interrupted during printing, see page 9.5.
If completing the checklist does not resolve the printer problem, check the following troubleshooting sections.	• "Understanding the LEDs" on page 1.3. • "Solving general printing problems" on page 9.5. • "Common Windows problems" on page 9.9. • "Common PostScript problems" on page 9.10. • "Common Macintosh problems" on page 9.10.

Solving general printing problems

For problems with the operation of your printer, refer to the table for suggested solutions.

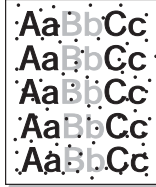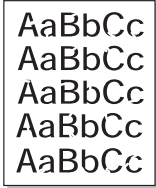| Condition	Possible cause	Suggested solutions
The printer does not print.	The printer is not receiving power.	Check the power cord connections. Check the power switch and the power source.
	The printer is not selected as the default printer.	Select **SP 3300 Series** or **SP 3300 Series PS** as your default printer.
	The printer cover is not closed.	Close the printer cover.
	Paper is jammed.	Clear the paper jam. See page 9.1.
	No paper is loaded.	Load paper. See page 5.4.
	The toner cartridge is not installed.	Install the toner cartridge.
	The printer may be in manual feed mode and out of paper.	Add paper to the manual tray, and press the **Cancel** button on the control panel.
	The connection cable between the computer and the printer is not connected properly.	Disconnect the printer cable and reconnect it.
	The connection cable between the computer and the printer is defective.	If possible, attach the cable to another computer that is working properly and try to print a document. You can also try using a different printer cable.
	The port setting is incorrect.	Check the Windows printer setting to make sure that the print job is sent to the correct port. If the computer has more than one port, make sure that the printer is attached to the correct one.

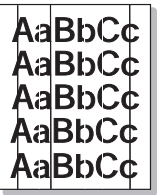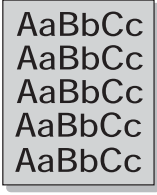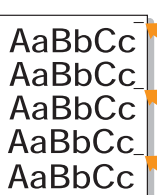| Condition	Possible cause	Suggested solutions
The printer does not print. (Continued)	The printer may be configured incorrectly.	Check the printer properties to ensure that all of the print settings are correct.
	The printer driver may be incorrectly installed.	Reinstall the printer driver; See the Software Section. Try printing a test page.
	The printer is malfunctioning.	Check the LEDs on the control panel to determine if the printer is indicating a system error.
Printer selects print media from the wrong paper source.	The paper source selection in the printer properties may be incorrect.	For many software applications, the paper source selection is found under the **Paper** tab within the printer properties. Select the correct paper source. See the Software Section.
Paper does not feed into the printer.	Paper has not been loaded correctly.	Remove paper from the tray and reload it correctly. Check that the adjustable guides are set correctly.
	There is too much paper in the tray.	Remove excess paper from the tray.
	The paper is too thick.	Use only paper that meets printer specifications.
Print job is extremely slow.	The job may be very complex.	Reduce the complexity of the page(s) or try adjusting the print quality settings. To adjust the print quality settings, reduce the resolution. If you have set the resolution to **1200 dpi (Best)**, change it to **600 dpi (Normal)**. See the Software Section. Change the port setting to the USB or network port to improve print speed. Your printer prints A4-sized paper at 28 ppm and letter-sized paper at 30 ppm.
	The computer may have insufficient random-access memory (RAM).	Simplify the page layout and remove any unnecessary graphics from the document.

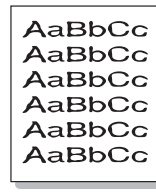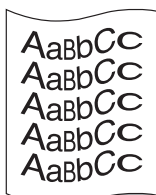| Condition	Possible cause	Suggested solutions
Half the page is blank.	The page layout is too complex.	Simplify the page layout and remove any unnecessary graphics from the document.
	The page orientation setting may be incorrect.	Change the page orientation in your application. See the Software Section.
	The paper size and the paper size settings do not match.	Ensure that the paper size in the printer driver settings matches the paper in the tray. Or, ensure that the paper size in the printer driver settings matches the paper selection in the software application settings you use.
The paper keeps jamming.	There is too much paper in the tray.	Remove excess paper from the tray. If printing on special print media, use the manual tray.
	An incorrect type of paper is being used.	Use only paper that meets printer specifications. If printing on special print media, use the manual tray.
	There may be debris inside the printer.	Open the front cover and remove the debris.
The printer prints, but the text is wrong, garbled, or incomplete.	The printer cable is loose or defective.	Disconnect and reconnect the printer cable. Try a print job that you have already printed successfully. If possible, attach the cable and printer to another computer and try a print job that you know works. Finally, try a new printer cable.
	The wrong printer driver was selected.	Check the application's printer selection menu to ensure that your printer is selected.
	The software application is malfunctioning.	Try printing a job from another application.
	If you are under the DOS environment, the font setting for your machine may be set incorrectly.	Change the font setting. See page 1.6.

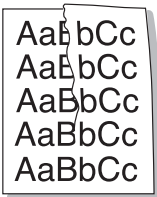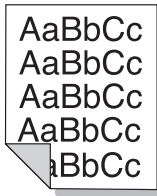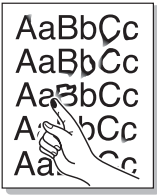| Condition	Possible cause	Suggested solutions
Pages print, but are blank.	The toner cartridge is defective or out of toner.	Redistribute the toner cartridge. See page 8.3. If necessary, replace the toner cartridge. See page 8.4.
	The file may have blank pages.	Check the file to ensure that it does not contain blank pages.
	Some parts, such as the controller or the board, may be defective.	Contact a service representative.
The illustrations print incorrectly in Adobe Illustrator.	The setting in the software application is wrong.	Select **Download as Bitmap** in the **Advanced Options** window of the graphic properties. Print the document again.
The printer does not print PDF file correctly. Some parts of graphics, text, or illustrations are missing.	Incompatibility between the PDF file and the Acrobat products.	Printing the PDF file as an image may solve this problem. Turn on **Print As Image** from the Acrobat printing options. **Note**: It will take longer to print when you print a PDF file as an image.

Solving print quality problems
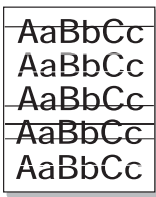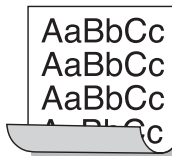
Dirt inside of the printer or improper paper loading may reduce print quality. See the table below to troubleshoot problems.

Condition	Suggested solutions
Light or faded print AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	If a vertical white streak or faded area appears on the page: • The toner supply is low. You may be able to temporarily extend the toner cartridge life. See page 8.3. If this does not improve print quality, install a new toner cartridge. • The paper may not meet paper specifications (for example, the paper is too moist or too rough). See page 5.3. • If the entire page is light, the print resolution setting is too light or toner save mode is on. Adjust the print resolution and toner save mode in the printer properties. See the Software Section. • A combination of faded or smeared defects may indicate that the printer needs cleaning. See page 8.1. • The surface of LSU may be dirty. Clean the LSU. See page 8.2.
Toner spots AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	• The paper may not meet specifications (for example, the paper is too moist or too rough). See page 5.3. • The transfer roller or paper path may be dirty. See page 8.1.
Dropouts AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	If generally rounded, faded areas occur randomly on the page: • A single sheet of paper may be defective. Try reprinting the job. • The moisture content of the paper is uneven or the paper has moist spots on its surface. Try a different brand of paper. See page 5.3. • The paper lot is bad. The manufacturing processes can cause some areas to reject toner. Try a different kind or brand of paper. • The toner cartridge may be defective. See "Vertical repetitive defects" on the next column. • If these steps do not correct the problems, contact a service representative.

Condition	Suggested solutions
Vertical lines AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	If black vertical streaks appear on the page: • The drum inside the toner cartridge has probably been scratched. Install a new toner cartridge. See page 8.4. If white vertical streaks appear on the page: • The surface of the LSU part inside the printer may be dirty. Clean the LSU. See page 8.2.
Gray background AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	If the amount of background shading becomes unacceptable, the procedures below may fix the problem. • Change to lighter weight pages. See page 5.3. • Check the printer's environment; low humidity (lower than 20% RH) or high humidity (higher than 80% RH) conditions can increase the amount of background shading. • Remove the old toner cartridge and install a new one. See page 8.4.
Toner smear AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	• Clean the inside of the printer. See page 8.1. • Check the paper type and quality. See page 5.2. • Remove the toner cartridge and install a new one. See page 8.4.
Vertical repetitive defects AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	If marks repeatedly appear on the printed side of the page at even intervals: • The toner cartridge may be damaged. If a repetitive mark occurs on the page, install a new toner cartridge. See page 8.4. • Parts of the printer may have toner on them. If the defects occur on the back of the page, the problem will likely correct itself after a few more pages. • The fusing assembly may be damaged. Contact a service representative.

Condition	Suggested solutions
Background scatter A	Background scatter results from bits of toner distributed on the printed page. • The paper may be too damp. Try printing with a different batch of paper. Do not open packages of paper until necessary so that the paper does not absorb too much moisture. • If background scatter occurs on an envelope, change the printing layout to avoid printing over areas that have overlapping seams on the reverse side. Printing on seams can cause problems. • If background scatter covers the entire surface area of a printed page, adjust the print resolution through your software application or via the printer properties window.
Misformed characters AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	• If characters are improperly formed and producing hollowed images, the paper stock may be too slick. Try a different paper. See page 5.3.
Page skew AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	• Ensure that the paper is loaded properly. • Check the paper type and quality. See page 5.2. • Ensure that the paper is loaded correctly and the adjustable guides are not too tight or too loose against the paper stack.
Curl or wave AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	• Ensure that the paper is loaded properly. • Check the paper type and quality. Both high temperature and humidity can cause paper curl. See page 5.2. • Turn over the stack of paper in the tray. Also try rotating the paper 180° in the tray.

Condition	Suggested solutions
Wrinkles or creases	• Ensure that the paper is loaded properly. • Check the paper type and quality. See page 5.2. • Turn over the stack of paper in the tray. Also try rotating the paper 180° in the tray.
Back of printouts are dirty	• The transfer roller may be dirty. See page 8.1. • Check for leaking toner. Clean the inside of the printer.
Solid black pages	• The toner cartridge may not be installed properly. Remove the cartridge and reinsert. • The toner cartridge may be defective and need replacing. Install a new toner cartridge. • The printer may require repair. Contact a service representative.
Loose toner	• Clean the inside of the printer. • Check the paper type and quality. See page 5.2. • Install a new toner cartridge. See page 8.4. • If the problem persists, the printer may require repair. Contact a service representative.
Character voids	Character voids are white areas within characters that should be solid black: • If you are using transparencies, try another type of transparency. Because of the composition of the transparency, some character voids may be normal. • You may be printing on the wrong surface on the paper. Turn over the paper in the tray. • The paper may not meet paper specifications. See page 5.3.

Condition	Suggested solutions
Horizontal stripes	If horizontally aligned black streaks or smears appear: • The toner cartridge may be installed improperly. Remove the cartridge and reinsert. • The toner cartridge may be defective. Install a new toner cartridge. See page 8.4. • If the problem persists, the printer may require repair. Contact a service representative.
Curl	If the printed paper is curled or paper does not feed into the printer: • Turn over the stack of paper in the tray. Also try rotating the paper 180° in the tray.
An unknown image repetitively appears on a next few sheets or loose toner, light print or contamination occurs.	Your printer is probably being used at an altitude of 1,000 m (3,281 ft) or above. The high altitude may affect the print quality such as loose toner or light imaging. You can set this option through **Printer Settings Utility** or **Printer** tab in printer driver's properties. See page 1.5.

Common Windows problems

Condition	Suggested solutions
"File in Use" message appears during installation.	Exit all software applications. Remove all software from the StartUp Group, then restart Windows. Reinstall the printer driver.
"General Protection Fault", "Exception OE", "Spool32", or "Illegal Operation" messages appear.	Close all other applications, reboot Windows, and try printing again.
"Fail To Print", "A printer timeout error occurred," messages appear.	These messages may appear during printing. Just keep waiting until the printer finishes printing. If the message appears in standby mode or after printing has been completed, check the connection and/or whether an error has occurred.

Note
• Refer to Microsoft Windows 2000/XP/Vista and Windows Server 2003 User's Guide that came with your PC for further information on Windows error messages.

Common PostScript problems

The following situations are PostScript language specific and may occur when several printer languages are being used.

Note
- To receive a printed or screen displayed message when PostScript errors occur, open the Print Options window and click the desired selection next to the PostScript errors section.

Condition	Possible cause	Suggested solutions
PostScript file can not be printed.	The PostScript driver may not be installed correctly.	• Print a configuration page and verify that the PostScript version is available for printing. • Install the PostScript driver; to installing the PS printer driver, see the Software Section. • If problem consists, contact a service representative.
"Limit Check Error" message appears.	The print job was too complex.	You might need to reduce the complexity of the page.
A PostScript error page prints.	Print job may not be PostScript.	Make sure that the print job is a PostScript job. Check to see whether the software application expected a setup or PostScript header file to be sent to the printer.
When print a document in Macintosh with Acrobat Reader 6.0 or higher, colors print incorrectly.	The resolution setting in the printer driver may not be matched with that in Acrobat Reader.	Make sure that the resolution setting in your printer driver matches that in Acrobat Reader.

Common Macintosh problems

Condition	Suggested solutions
The printer does not print PDF file correctly. Some parts of graphics, text, or illustrations are missing.	Incompatibility between the PDF file and the Acrobat products: Printing the PDF file as an image may solve this problem. Turn on **Print As Image** from the Acrobat printing options. **Note**: It will take longer to print when you print a PDF file as an image.
The document has printed, but the print job has not disappeared from the spooler in Mac OS 10.3.2.	Update your Mac OS to OS 10.3.3 or higher.
Some letters are not displayed normally during the cover sheet printing.	This problem is caused because Mac OS cannot find the font during the cover page printing. Alphanumeric characters, in the Billing Info field, are only allowed for printing on the cover page. Other characters will be broken on the printout.

10 Installing accessories

Your machine is a full-featured model that has been optimized to meet most of your printing needs. Recognizing that each user may have different requirements, however, manufacturer makes several accessories available to enhance your machine's capabilities.

This chapter includes:

- **Precautions to take when installing accessories**
- **Installing a memory module**

Precautions to take when installing accessories

Disconnect the power cord

Never remove the control board cover while the power is turned on.

To avoid the possibility of an electrical shock, always disconnect the power cord when installing or removing ANY internal or external accessories.

Discharge static electricity

The control board and internal accessories (network interface card or memory module) are sensitive to static electricity. Before installing or removing any internal accessories, discharge static electricity from your body by touching something metal, such as the metal back plate on any device plugged into a grounded power source. If you walk around before finishing the installation, repeat this procedure to discharge any static electricity again.

Installing a memory module

Your machine has a dual in-line memory module (DIMM). Use this memory module slot to install additional memory.

When you are expanding the memory capacity, you can add a memory module to the vacant memory slot. Your machine has 32 MB memory, and you can add a 128 MB memory module.

1 Turn the machine off and unplug all cables from the machine.

2 Open the control board cover.
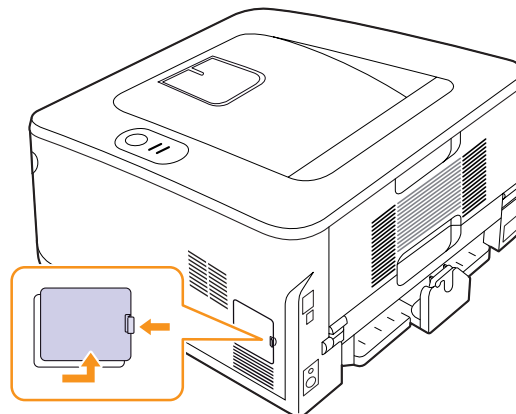
3 Take out a new memory module from the plastic bag.

4 Holding the memory module by the edges, align the memory module on the slot at about a 30-degree tilt. Make sure that the notches of the module and the grooves on the slot fit each other.
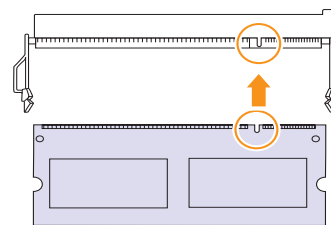
> **Note**
> The notches and grooves illustrated above may not match those on an actual memory module and its slot.

5 Press the memory module into the slot with care until you hear a "click".
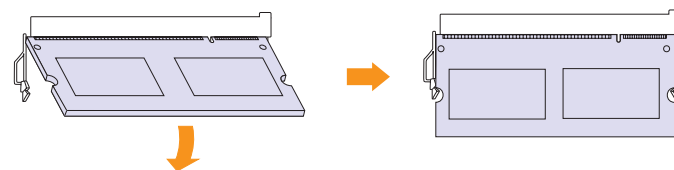
> **Note**
> Do not press the memory module strongly or the module may be damaged. If the module does not seem to fit into the slot properly, carefully try the previous procedure again.

6 Replace the control board cover.

7 Reconnect the power cord and printer cable, and turn the machine on.

> **Note**
> To release the memory module, pull the two tabs on the sides of the slot outwards, then the module springs out.

Activating the added memory in the PS printer properties

After installing the memory module, you need to select it in the printer properties of the PostScript printer driver in order to use it.

1   Make sure that the PostScript printer driver is installed on your computer. For details about installing the PS printer driver, see Software section.

2   Click the Windows **Start** menu.

3   For Windows 2000, select **Settings** and then **Printers**.

    For Windows XP and Windows Server 2003, select **Printers and Faxes**.

    For Windows Vista, select **Control Panel** > **Hardware and Sound** > **Printers**.

4   Select the **SP 3300 Series PS** printer.

5   Click the right mouse button on the printer icon and select **Properties**.

6   For Windows 2000/XP/0Vista and Windows Server 2003, select **Device Settings**.

7   Select the amount of memory you installed from **Printer Memory** in the **Installable Options** section.

8   Click **OK**.

11 Specifications

Printer specifications

Item	Specifications and description
Printing speed[a]	Up to 28 ppm in A4 (30 ppm in Letter) Duplex: 14 ipm in A4 (14.5 ipm in Letter)
Resolution	Up to 1200 x 1200 dpi effective output
Warm-up time	Less than 15 seconds (From sleep mode)
First print out time	8.5 seconds (From Ready) Sleep mode: 25 seconds
Power rating	AC 110-127 V or AC 220-240 V See the Rating label on the machine for the correct voltage, frequency (hertz) and type of current for your machine.
Power consumption	Average: 500 W Power save mode: Less than 11 W
Noise level[b]	Standby mode: Less than 26 dBA Printing mode: Less than 50 dBA
Toner cartridge life[c]	Average cartridge yield 5,000 standard pages[d]. (Ships with 2,000 pages Starter/Standard Toner Cartridge)
Duty cycle	Monthly: Up to 50,000 pages
Weight	11.9 Kg (including consumables)
Package weight	Paper: 2.4 Kg, Plastic: 0.3 Kg
Memory	32 MB (Max. 160 MB)
	128 MB optional memory available
External dimensions (W x D x H)	364 x 369 x 210 mm (14.3 x 14.5 x 8.3 inches)
Operating environment	Temperature: 10 to 32°C (50 to 90°F) Humidity: 20 to 80% RH
Printer language	PCL6[e], PostScript 3
Fonts	1 bitmap, 45 scalable, 136 PostScript 3 fonts

Item	Specifications and description
Interface	• USB Interface Standard - USB 2.0: Hi-Speed USB 2.0 • Network Interface Standard (SP 3300DN only) - Ethernet 10/100 Base TX wired LAN
OS compatibility	• Windows 2000/XP (32/64 bit)/Vista and Windows Server 2003 • Mac OS 8.6~9.2, 10.1~10.5
Printer drivers	• PCL6 driver: Windows 2000/XP (32/64 bit)/Vista and Windows Server 2003 • PostScript driver: Windows 2000/XP (32/64 bit)/Vista and Windows Server 2003, Mac OS 8.6~9.2, 10.1~10.5
Options	250-sheet tray, DIMM
Fusing temperature	180° C (356° F)

a. Print speed will be affected by operating system used, computing performance, application software, connection method, print media type, print media size, and job complexity.
b. Sound pressure Level, ISO7779.
c. The number of pages may be affected by operating environment, printing interval, print media type, and print media size.
d. Declared yield value in accordance with ISO/IEC 19752.
e. Compatible with PCL6 version 2.1.

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Software section

Software section
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6. Using Utility Applications

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1 Installing Printer Software in Windows

This chapter includes:

- **Installing Printer Software**
- **Reinstalling Printer Software**
- **Removing Printer Software**

NOTE: The following procedure is based on Windows XP, for other operating systems, refer to the corresponding Windows user's guide or online help.

Installing Printer Software

You can install the printer software for local printing or network printing. To install the printer software on the computer, perform the appropriate installation procedure depending on the printer in use.

A printer driver is software that lets your computer communicate with your printer. The procedure to install drivers may differ depending on the operating system you are using.

All applications should be closed on your PC before beginning installation.

Installing Software for Local Printing

A local printer is a printer directly attached to your computer using the printer cable supplied with your printer, such as a USB or parallel cable. If your printer is attached to a network, skip this step and go to "Installing Software for Network Printing" on page 6.

You can install the printer software using the typical or custom method.

NOTE: If the "New Hardware Wizard" window appears during the installation procedure, click ⊠ in the upper right corner of the box to close the window, or click **Cancel**.

Typical Installation

This is recommended for most users. All components necessary for printer operations will be installed.

1. Make sure that the printer is connected to your computer and powered on.

2. Insert the supplied CD-ROM into your CD-ROM drive.

   The CD-ROM should automatically run, and an installation window appears.

   If the installation window does not appear, click **Start** and then **Run**. Type **X:\Setup.exe**, replacing "**X**" with the letter which represents your drive and click **OK**.

   If you use Windows Vista, click **Start** → **All programs** → **Accessories** → **Run**, and type **X:\Setup.exe**.

   If the **AutoPlay** window appears in Windows Vista, click **Run Setup.exe** in **Install or run program** field, and click **Continue** in the **User Account Control** window.

3. Click **Next**.

- If necessary, select a language from the drop-down list.
- **View User's Guide**: Allows you to view the User's Guide. If your computer doesn't have Adobe Acrobat, click on this option and it will automatically install Adobe Acrobat Reader for you.

4 Select **Typical installation for a local printer**. Click **Next**.
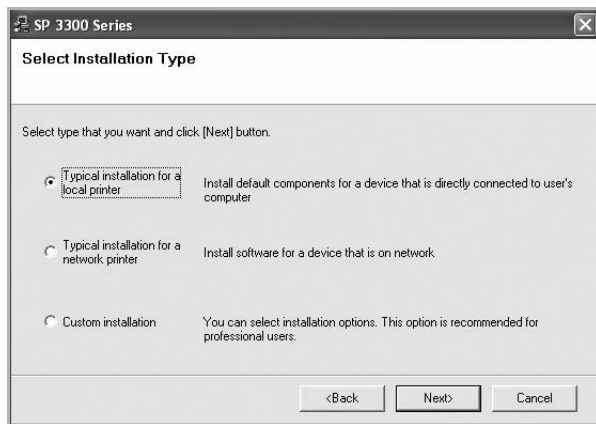
NOTE: If your printer is not already connected to the computer, the following window will appear.
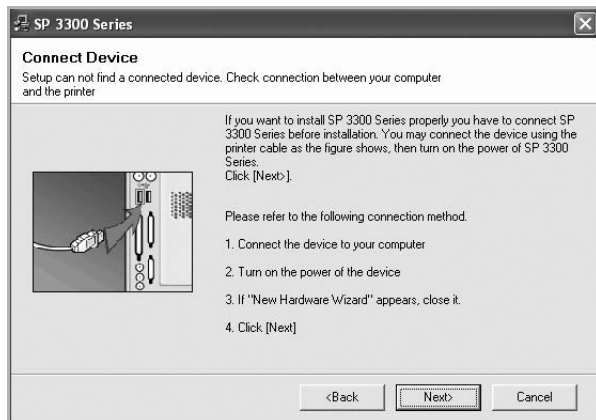
- After connecting the printer, click **Next**.
- If you don't want to connect the printer at this time, click **Next**, and **No** on the following screen. Then the installation will start and a test page will not be printed at the end of the installation.
- *The installation window that appears in this User's Guide may differ depending on the interface in use.*

5 After the installation is finished, a window asking you to print a test page appears. If you choose to print a test page, select the checkbox and click **Next**.

Otherwise, just click **Next** and skip to step 7.

6 If the test page prints out correctly, click **Yes**.

If not, click **No** to reprint it.

7 Click **Finish**.

NOTE: After setup is complete, if your printer driver doesn't work properly, reinstall the printer driver. See "Reinstalling Printer Software" on page 9.

Custom Installation

You can choose individual components to install.

1 Make sure that the printer is connected to your computer and powered on.

2 Insert the supplied CD-ROM into your CD-ROM drive.

The CD-ROM should automatically run, and an installation window appears.

If the installation window does not appear, click **Start** and then **Run**. Type **X:\Setup.exe**, replacing "**X**" with the letter which represents your drive and click **OK**.

If you use Windows Vista, click **Start** → **All programs** → **Accessories** → **Run**, and type **X:\Setup.exe**.

If the **AutoPlay** window appears in Windows Vista, click **Run Setup.exe** in **Install or run program** field, and click **Continue** in the **User Account Control** window.

3 Click **Next**.

- If necessary, select a language from the drop-down list.
- **View User's Guide**: Allows you to view the User's Guide. If your computer doesn't have Adobe Acrobat, click on this option and it will automatically install Adobe Acrobat Reader for you.

4 Select **Custom installation**. Click **Next**.

5 Select your printer and click **Next**.

NOTE: If your printer is not already connected to the computer, the following window will appear.
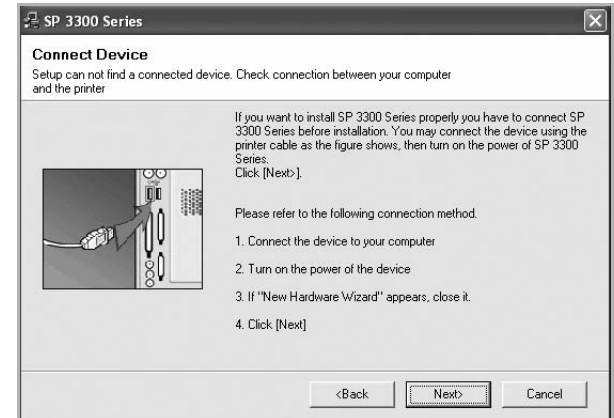
- After connecting the printer, click **Next**.
- If you don't want to connect the printer at this time, click **Next**, and **No** on the following screen. Then the installation will start and a test page will not be printed at the end of the installation.
- *The installation window that appears in this User's Guide may differ depending on the interface in use.*

6 Select the components to be installed and click **Next**.
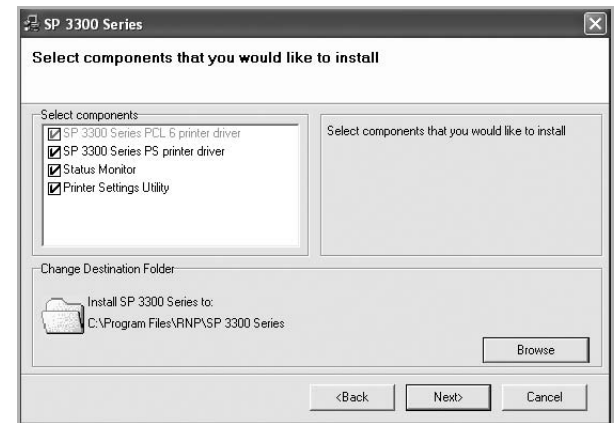
NOTE: You can change the desired installation folder by clicking [**Browse**].

7 After the installation is finished, a window asking you to print a test page appears. If you choose to print a test page, select the checkbox and click **Next**.

Otherwise, just click **Next** and skip to step 9.

8 If the test page prints out correctly, click **Yes**.

If not, click **No** to reprint it.

9 Click **Finish**.
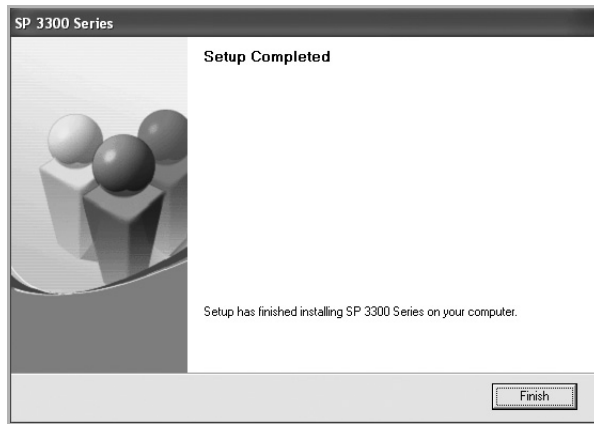
Installing Software for Network Printing

When you connect your printer to a network, you must first configure the TCP/IP settings for the printer. After you have assigned and verified the TCP/IP settings, you are ready to install the software on each computer on the network.

You can install the printer software using the typical or custom method.

Typical Installation

This is recommended for most users. All components necessary for printer operations will be installed.

1 Make sure that the printer is connected to your network and powered on. For details about connecting to the network, see the supplied printer's User's Guide.

2 Insert the supplied CD-ROM into your CD-ROM drive.

The CD-ROM should automatically run, and an installation window appears.

If the installation window does not appear, click **Start** and then **Run**. Type **X:\Setup.exe**, replacing "**X**" with the letter which represents your drive and click **OK**.

If you use Windows Vista, click **Start** → **All programs** → **Accessories** → **Run**, and type **X:\Setup.exe**.
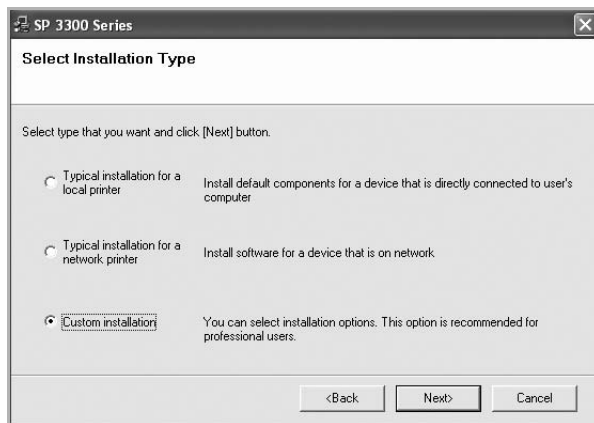
If the **AutoPlay** window appears in Windows Vista, click **Run Setup.exe** in **Install or run program** field, and click **Continue** in the **User Account Control** window.
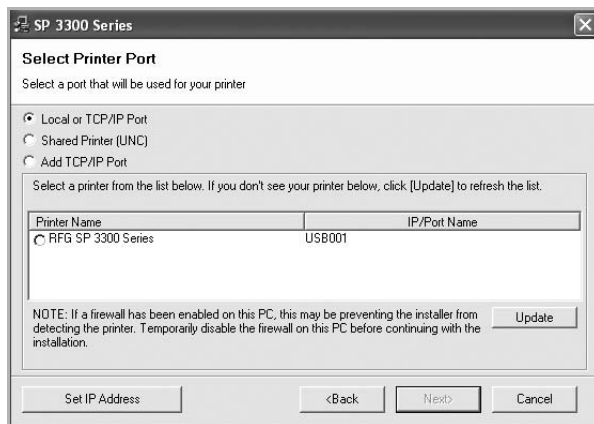
3 Click **Next**.

• If necessary, select a language from the drop-down list.

• **View User's Guide**: Allows you to view the User's Guide. If your computer doesn't have Adobe Acrobat, click on this option and it will automatically install Adobe Acrobat Reader for you.

4 Select **Typical installation for a network printer**. Click **Next**.

5 The list of printers available on the network appears. Select the printer you want to install from the list and then click **Next**.

- If you do not see your printer on the list, click **Update** to refresh the list, or select **Add TCP/IP Port** to add your printer to the network. To add the printer to the network, enter the port name and the IP address for the printer.

    To verify your printer's IP address or the MAC address, print a Network Configuration page.

- To find a shared network printer (UNC Path), select **Shared Printer [UNC]** and enter the shared name manually or find a shared printer by clicking the **Browse** button.

NOTE: If you cannot find your machine in network, please turn off the firewall and click **Update**.
For Windows operating system, click **Start → Control Panel** and start windows firewall, and set this option unactivated. For other operating system, refer to its on-line guide.

6 After the installation is finished, a window appears asking you to print a test page. If you so desire, select the corresponding checkbox and click **Finish**.

Otherwise, just click **Finish**.
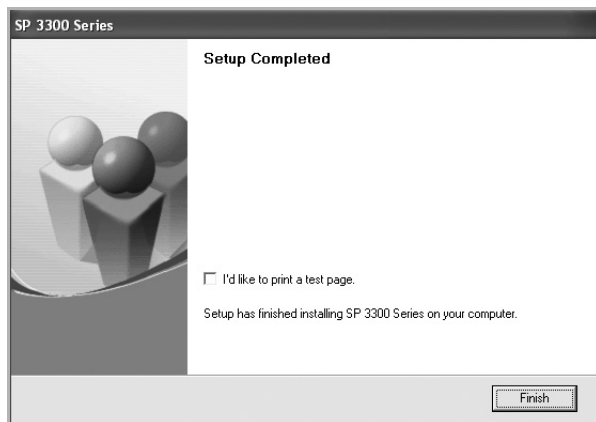
NOTE: After setup is complete, if your printer driver doesn't work properly, reinstall the printer driver. See "Reinstalling Printer Software" on page 9.

Custom Installation

You can choose individual components to install and set a specific IP address.

1 Make sure that the printer is connected to your network and powered on. For details about connecting to the network, see the supplied printer's User's Guide.

2 Insert the supplied CD-ROM into your CD-ROM drive.

The CD-ROM should automatically run, and an installation window appears.

If the installation window does not appear, click **Start** and then **Run**. Type **X:\Setup.exe**, replacing "**X**" with the letter which represents your drive and click **OK**.

If you use Windows Vista, click **Start → All programs → Accessories → Run**, and type **X:\Setup.exe**.

If the **AutoPlay** window appears in Windows Vista, click **Run Setup.exe** in **Install or run program** field, and click **Continue** in the **User Account Control** window.

3 Click **Next**.

- If necessary, select a language from the drop-down list.
- **View User's Guide**: Allows you to view the User's Guide. If your computer doesn't have Adobe Acrobat, click on this option and it will automatically install Adobe Acrobat Reader for you.

4 Select **Custom installation**. Click **Next**.

7

5 The list of printers available on the network appears. Select the printer you want to install from the list and then click **Next**.

• If you do not see your printer on the list, click **Update** to refresh the list, or select **Add TCP/IP Port** to add your printer to the network. To add the printer to the network, enter the port name and the IP address for the printer.

To verify your printer's IP address or the MAC address, print a Network Configuration page.

• To find a shared network printer (UNC Path), select **Shared Printer [UNC]** and enter the shared name manually or find a shared printer by clicking the **Browse** button.

NOTE: If you cannot find your machine in network, please turn off the firewall and click **Update**.
For Windows operating system, click **Start** → **Control Panel** and start windows firewall, and set this option unactivated. For other operating system, refer to its on-line guide.

TIP: If you want to set a specific IP address on a specific network printer, click the **Set IP Address** button. The Set IP Address window appears. Do as follows:
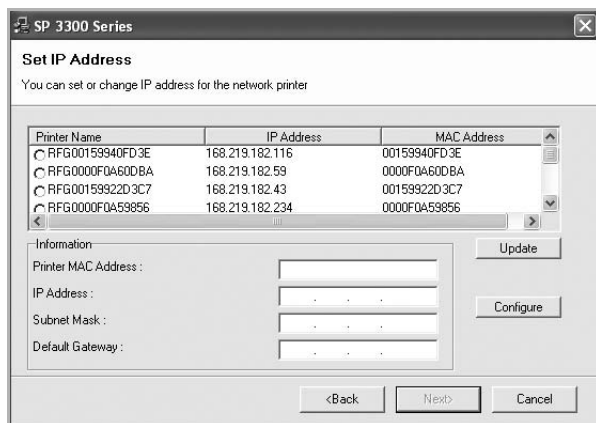
a. Select a printer to be set with a specific IP address from the list.

b. Configure an IP address, subnet mask, and gateway for the printer manually and click **Configure** to set the specific IP address for the network printer.
c. Click **Next**.

6 Select the components to be installed and click **Next**.

NOTE: You can change the desired installation folder by clicking [**Browse**].

7 Select the components to be installed. After selecting the components, the following window appears. You can also change the printer name, set the printer to be shared on the network, set the printer as the default printer, and change the port name of each printer. Click **Next**.
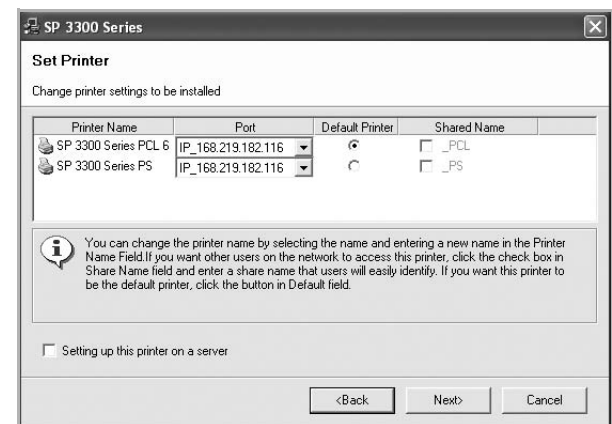
To install this software on a server, select the **Setting up this printer on a server** checkbox.

8 After the installation is finished, a window appears asking you to print a test page. If you so desire, select the corresponding checkbox and click **Finish**.
Otherwise, just click **Finish**.
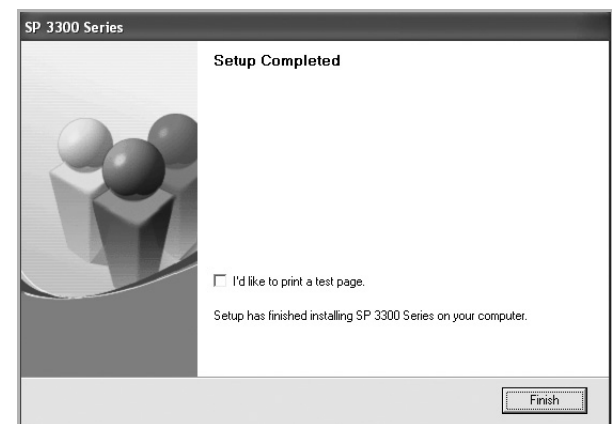
NOTE: After setup is complete, if your printer driver doesn't work properly, reinstall the printer driver. See "Reinstalling Printer Software" on page 9.

Reinstalling Printer Software

You can reinstall the software if installation fails.

1 Start Windows.

2 From the **Start** menu select **Programs** or **All Programs** → **SP 3300 Series** → **Maintenance**.

3 Select **Repair** and click **Next**.

4 The list of printers available on the network appears. Select the printer you want to install from the list and then click **Next**.
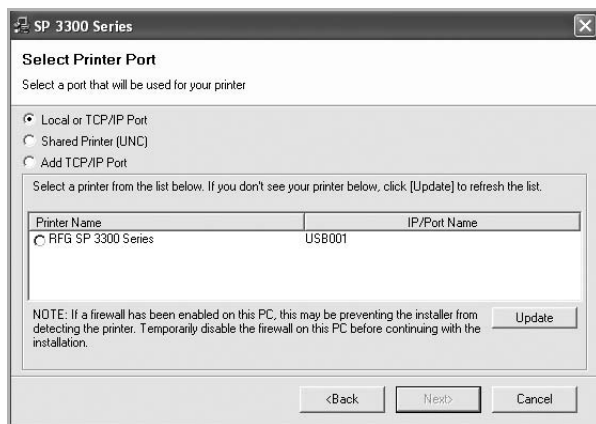
- If you do not see your printer on the list, click **Update** to refresh the list, or select **Add TCP/IP Port** to add your printer to the network. To add the printer to the network, enter the port name and the IP address for the printer.

- To find a shared network printer (UNC Path), select **Shared Printer [UNC]** and enter the shared name manually or find a shared printer by clicking the **Browse** button.

You will see a component list so that you can reinstall any item individually.

NOTE: If your printer is not already connected to the computer, the following window will appear.
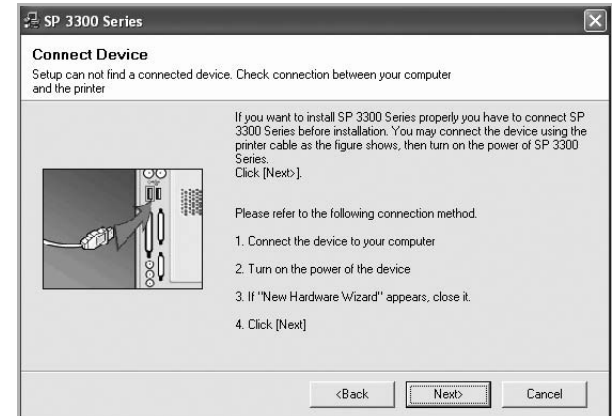
- After connecting the printer, click **Next**.
- If you don't want to connect the printer at this time, click **Next**, and **No** on the following screen. Then the installation will start and a test page will not be printed at the end of the installation.
- *The reinstallation window that appears in this User's Guide may differ depending on the interface in use.*

5 Select the components you want to reinstall and click **Next**.

If you installed the printer software for local printing and you select **SP 3300 Series**, the window asking you to print a test page appears. Do as follows:

a. To print a test page, select the check box and click **Next**.

b. If the test page prints out correctly, click **Yes**.

If it doesn't, click **No** to reprint it.

6 When the reinstallation is done, click **Finish**.

Removing Printer Software

1 Start Windows.

2 From the **Start** menu select **Programs** or **All Programs** →
SP 3300 Series → **Maintenance**.

3 Select **Remove** and click **Next**.

You will see a component list so that you can remove any item
individually.

4 Select the components you want to remove and then click
Next.

5 When your computer asks you to confirm your selection, click
Yes.

The selected driver and all of its components are removed from
your computer.

6 After the software is removed, click **Finish**.

2 Basic Printing

This chapter explains the printing options and common printing tasks in Windows.

This chapter includes:

- **Printing a Document**
- **Printing to a file (PRN)**
- **Printer Settings**
  - **- Layout Tab**
  - **- Paper Tab**
  - **- Graphics Tab**
  - **- Extras Tab**
  - **- About Tab**
  - **- Printer Tab**
  - **- Using a Favorite Setting**
  - **- Using Help**

Printing a Document

NOTES:
- Your printer driver **Properties** window that appears in this User's Guide may differ depending on the printer in use. However the composition of the printer properties window is similar.
- *Check the Operating System(s) that are compatible with your printer. Please refer to the OS Compatibility section of Printer Specifications in your Printer User's Guide.*
- If you need to know the exact name of your printer, you can check the supplied CD-ROM.

The following procedure describes the general steps required for printing from various Windows applications. The exact steps for printing a document may vary depending on the application program you are using. Refer to the User's Guide of your software application for the exact printing procedure.

1 Open the document you want to print.

2 Select **Print** from the **File** menu. The Print window is displayed. It may look slightly different depending on your application.

The basic print settings are selected within the Print window. These settings include the number of copies and print range.

Make sure that your printer is selected.
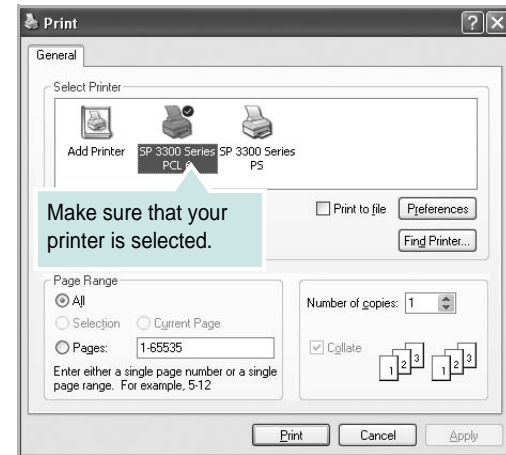
3 Select **your printer driver** from the **Name** drop-down list.

To take advantage of the printer features provided by your printer driver, click **Properties** or **Preferences** in the application's Print window. For details, see "Printer Settings" on page 12.

If you see **Setup**, **Printer**, or **Options** in your Print window, click it instead. Then click **Properties** on the next screen.

Click **OK** to close the printer properties window.

4 To start the print job, click **OK** or **Print** in the Print window.

Printing to a file (PRN)

You will sometimes need to save the print data as a file for your purpose.

To create a file:

1 Check the **Print to file** box at the **Print** window.
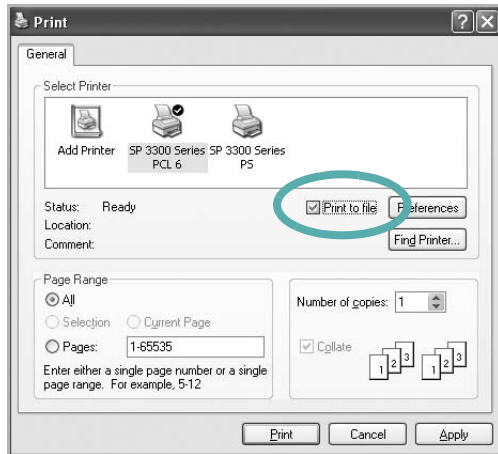
2 Select the folder and assign a name of the file and then click OK.

Printer Settings

You can use the printer properties window, which allows you to access all of the printer options you need when using your printer. When the printer properties are displayed, you can review and change the settings needed for your print job.

Your printer properties window may differ, depending on your operating system. This Software User's Guide shows the Properties window for Windows XP.

Your printer driver **Properties** window that appears in this User's Guide may differ depending on the printer in use.

If you access printer properties through the Printers folder, you can view additional Windows-based tabs (refer to your Windows User's Guide) and the Printer tab (see "Printer Tab" on page 16).

NOTES:
- Most Windows applications will override settings you specify in the printer driver. Change all print settings available in the software application first, and change any remaining settings using the printer driver.
- The settings you change remain in effect only while you are using the current program. **To make your changes permanent**, make them in the Printers folder.
- The following procedure is for Windows XP. For other Windows OS, refer to the corresponding Windows User's Guide or online help.
  1. Click the Windows **Start** button.
  2. Select **Printers and Faxes**.
  3. Select **your printer driver icon**.
  4. Right-click on the printer driver icon and select **Printing Preferences**.
  5. Change the settings on each tab, click OK.

Layout Tab

The **Layout** tab provides options to adjust how the document appears on the printed page. The **Layout Options** includes **Multiple Pages per Side**, **Poster Printing** and **Booklet Printing**. See "Printing a Document" on page 11 for more information on accessing printer properties.
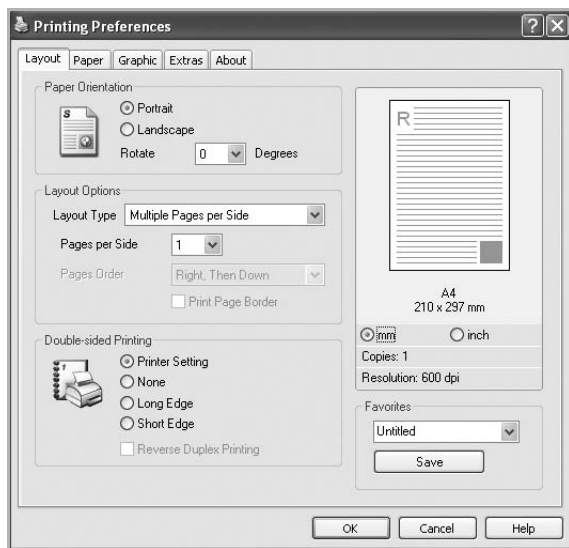
Paper Orientation

Paper Orientation allows you to select the direction in which information is printed on a page.

- **Portrait** prints across the width of the page, letter style.
- **Landscape** prints across the length of the page, spreadsheet style.
- **Rotate** allows you to rotate the page the selected degrees.
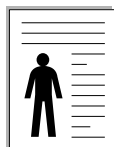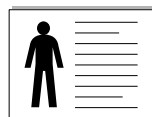
▲ Portrait   ▲ Landscape

Layout Options

Layout Options allows you to select advanced printing options. You can choose **Multiple Pages per Side** and **Poster Printing**.

- For details, see "Printing Multiple Pages on One Sheet of Paper (N-Up Printing)" on page 17.
- For details, see "Printing Posters" on page 18
- For details, see "Printing Booklets" on page 18

Double-sided Printing

Double-sided Printing allows you to print on both sides of paper.

- For details, see "Printing on Both Sides of Paper" on page 19.

Paper Tab

Use the following options to set the basic paper handling specifications when you access the printer properties. See "Printing a Document" on page 11 for more information on accessing printer properties.

Click the **Paper** tab to access various paper properties.
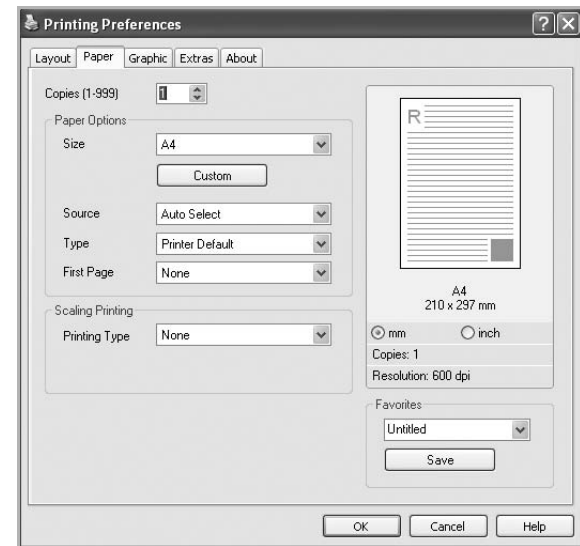
Copies

Copies allows you to choose the number of copies to be printed. You can select 1 to 999 copies.

Paper Options

Size

Size allows you to set the size of paper you loaded in the tray.
If the required size is not listed in the **Size** box, click **Custom**. When the **Custom Paper Setting** window appears, set the paper size and click **OK**. The setting appears in the list so that you can select it.

Source

Make sure that **Source** is set to the corresponding paper tray.
Use **Manual Feeder** when printing on special materials like envelopes and transparencies. You have to load one sheet at a time into the Manual Feeder.
If the paper source is set to **Auto Select**, the printer automatically picks up print material in the following tray order: Manual Feeder, Tray 1, optional Tray 2.

Type

Set **Type** to correspond to the paper loaded in the tray from which you want to print. This will let you get the best quality printout. If not, print quality may not be acheived as you want.

Cotton: 20 lb to 24 lb (75~90 g/m^2) cotton paper such as Gilbert 25% and Gilbert 100%.

Plain: Normal plain paper. Select this type if your printer is monochrome and printing on the 16 lb (60 g/m^2) cotton paper.

Recycled: 20 lb to 24 lb (75~90 g/m^2) recycled paper.

Color: 20 lb to 24 lb (75~90 g/m^2) color-backgrounded paper.
Archive: If you need to keep print-out for a long period time such as archives, select this option.

First Page
This property allows you to print the first page using a different paper type from the rest of the document. You can select the paper source for the first page.
For example, load thick stock for the first page into the Manual Feeder, and plain paper into Tray 1. Then, select **Tray1** in the **Source** option and **Manual Feeder** in the **First Page** option.

Scaling Printing
Scaling Printing allows you to automatically or manually scale your print job on a page. You can choose from **None**, **Reduce/Enlarge**, and **Fit to Page**.

- For details, see "Printing a Reduced or Enlarged Document" on page 19.
- For details, see "Fitting Your Document to a Selected Paper Size" on page 19.

Graphics Tab

Use the following Graphic options to adjust the print quality for your specific printing needs. See "Printing a Document" on page 11 for more information on accessing printer properties.

Click the **Graphic** tab to display the properties shown below.
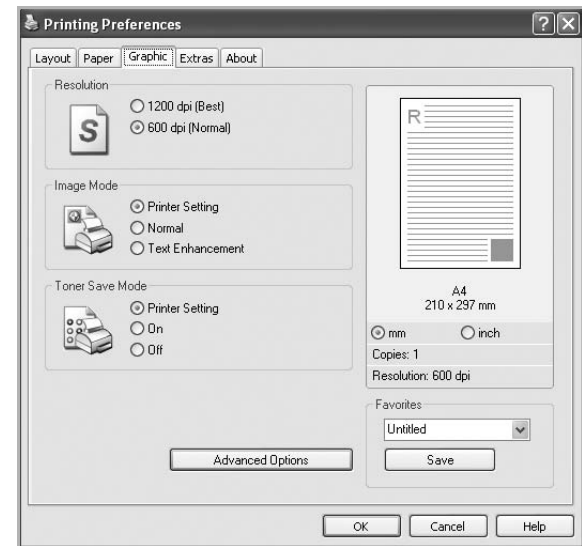
Resolution
The higher the setting, the sharper the clarity of printed characters and graphics. The higher setting also may increase the time it takes to print a document.

Image Mode
The available options are Normal and Text Enhancement.
- **Printer Setting**: If you select this option, this feature is determined by the setting you've made on the control panel of the printer.
- **Normal**: This setting is for normal documents.
- **Text Enhancement**: Image Mode allows the user to enhance printouts.

Toner Save Mode
Selecting this option extends the life of your toner cartridge and reduces your cost per page without a significant reduction in print quality.
- **Printer Setting**: If you select this option, this feature is determined by the setting you've made on the control panel of the printer.
- **On**: Select this option to allow the printer to use less toner on each page.
- **Off**: If you don't need to save toner when printing a document, select this option.

Advanced Options

You can set advanced settings by clicking the **Advanced Options** button.

- **TrueType Options**: This option determines what the driver tells the printer about how to image the text in your document. Select the appropriate setting according to the status of your document.
  - **Download as Outline**: When this option is selected, the driver will download any TrueType fonts that are used in your document not already stored (resident) on your printer. If, after printing a document, you find that the fonts did not print correctly, choose Download as bit image and resubmit your print job. The Download as bit image setting is often useful when printing Adobe.
  - **Download as Bitmap**: When this option is selected, the driver will download the font data as bitmap images. Documents with complicated fonts, such as Korean or Chinese, or various other fonts, will print faster in this setting.
  - **Print as Graphics**: When this option is selected, the driver will download any fonts as graphics. When printing documents with high graphic content and relatively few TrueType fonts, printing performance (speed) may be enhanced in this setting.
- **Print All Text To Black**: When the **Print All Text To Black** option is checked, all text in your document prints solid black, regardless of the color it appears on the screen.

Extras Tab

You can select output options for your document. See "Printing a Document" on page 11 for more information about accessing the printer properties.

Click the **Extras** tab to access the following feature:
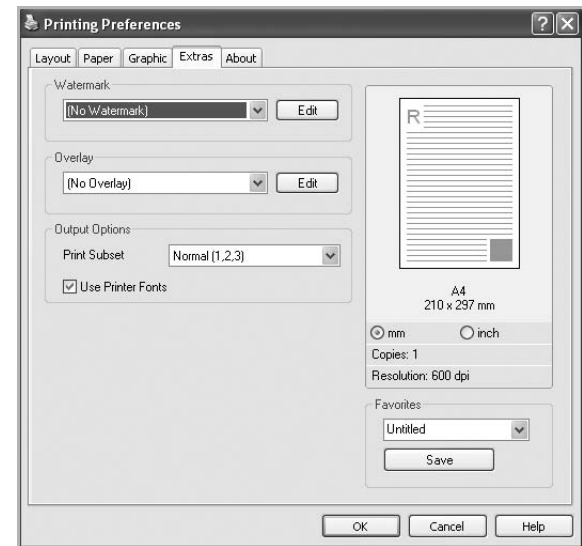
Watermark
You can create a background text image to be printed on each page of your document. For details, see "Using Watermarks" on page 20.

Overlay
Overlays are often used to take the place of preprinted forms and letterhead paper. For details, see "Using Overlays" on page 21.

Output Options
- **Print Subset**: You can set the sequence in which the pages print. Select the print order from the drop-down list.
  - **Normal (1,2,3)**: Your printer prints all pages from the first page to the last page.
  - **Reverse All Pages (3,2,1)**: Your printer prints all pages from the last page to the first page.
  - **Print Odd Pages**: Your printer prints only the odd numbered pages of the document.
  - **Print Even Pages**: Your printer prints only the even numbered pages of the document.
- **Use Printer Fonts**: When Use Printer Fonts is checked, the printer uses the fonts that are stored in its memory (resident fonts) to print your document, rather than downloading the fonts used in your document. Because downloading fonts takes time, selecting this option can speed up your printing time. When using Printer fonts, the printer will try to match the fonts used in your document to those stored in its memory. If, however, you use fonts in your document that are very different from those resident in the printer, your printed output will appear very different from what it looks like on the screen.

About Tab

Use the **About** tab to display the copyright notice and the version number of the driver. See "Printing a Document" on page 11 for more information about accessing printer properties.

Printer Tab

If you access printer properties through the **Printers** folder, you can view the **Printer** tab. You can set the printer configuration.

The following procedure is for Windows XP. For other Windows OS, refer to the corresponding Windows User's Guide or online help.

1 Click the Windows **Start** menu.

2 Select **Printers and Faxes**.

3 Select **your printer driver** icon.

4 Right-click on the printer driver icon and select **Properties**.

5 Click the **Printer** tab and set the options.

Using a Favorite Setting

The **Favorites** option, which is visible on each properties tab, allows you to save the current properties settings for future use.

To save a **Favorites** item:

1 Change the settings as needed on each tab.

2 Enter a name for the item in the **Favorites** input box.
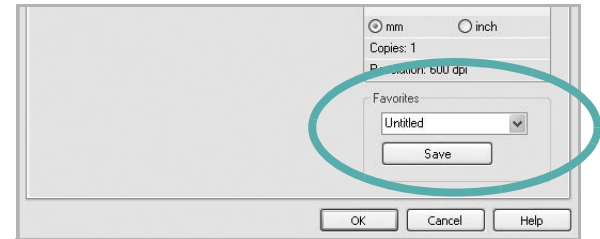
3 Click **Save**.

When you save **Favorites**, all current driver settings are saved.

To use a saved setting, select the item from the **Favorites** drop down list. The printer is now set to print according to the Favorites setting you selected.

To delete a Favorites item, select it from the list and click **Delete**.

You can also restore the printer driver's default settings by selecting **Printer Default** from the list.

Using Help

Your printer has a help screen that can be activated by clicking the **Help** button in the printer properties window. These help screens give detailed information about the printer features provided by the printer driver.

You can also click ? from the upper right corner of the window, and then click on any setting.

3 Advanced Printing

This chapter explains printing options and advanced printing tasks.

NOTE:
- Your printer driver **Properties** window that appears in this User's Guide may differ depending on the printer in use. However the composition of the printer properties window is similar.
- If you need to know the exact name of your printer, you can check the supplied CD-ROM.

This chapter includes:

- **Printing Multiple Pages on One Sheet of Paper (N-Up Printing)**
- **Printing Posters**
- **Printing Booklets**
- **Printing on Both Sides of Paper**
- **Printing a Reduced or Enlarged Document**
- **Fitting Your Document to a Selected Paper Size**
- **Using Watermarks**
- **Using Overlays**

Printing Multiple Pages on One Sheet of Paper (N-Up Printing)

You can select the number of pages to print on a single sheet of paper. To print more than one page per sheet, the pages will be reduced in size and arranged in the order you specify. You can print up to 16 pages on one sheet.

1 To change the print settings from your software application, access printer properties. See "Printing a Document" on page 11.

2 From the **Layout** tab, choose **Multiple Pages per Side** in the **Layout Type** drop-down list.

3 Select the number of pages you want to print per sheet (1, 2, 4, 6, 9, or 16) in the **Pages per Side** drop-down list.

4 Select the page order from the **Page Order** drop-down list, if necessary.

Check **Print Page Border** to print a border around each page on the sheet.

5 Click the **Paper** tab, select the paper source, size, and type.

6 Click **OK** and print the document.

Printing Posters
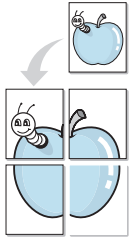
This feature allows you to print a single-page document onto 4, 9, or 16 sheets of paper, for the purpose of pasting the sheets together to form one poster-size document.

NOTE: The poster printing option is available when 600 dpi is selected in the resolution option on the **Graphic** tab.

1 To change the print settings from your software application, access printer properties. See "Printing a Document" on page 11.

2 Click the **Layout** tab, select **Poster Printing** in the **Layout Type** drop-down list.

3 Configure the poster option:

You can select the page layout from **Poster<2x2>**, **Poster<3x3>**, **Poster<4x4>** or **Custom**. If you select **Poster<2x2>**, the output will be automatically stretched to cover 4 physical pages. If the option is set to Custom, you can enlarge the original from 150% to 400%. Depending on the level of the enlargement, the page layout is automatically adjusted to **Poster<2x2>**, **Poster<3x3>**, **Poster<4x4>**.

▲ 2x2

▲ 3x3

Specify an overlap in millimeters or inches to make it easier to pasting the sheets together.

0.15 inches

0.15 inches

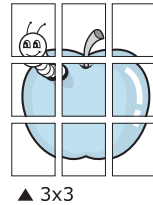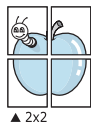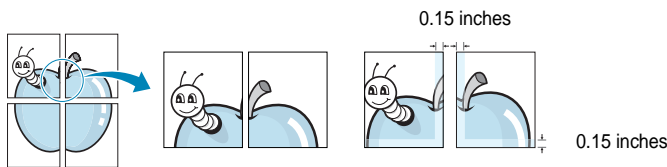**4** Click the **Paper** tab, select the paper source, size, and type.

5 Click **OK** and print the document. You can complete the poster by pasting the sheets together.

Printing Booklets
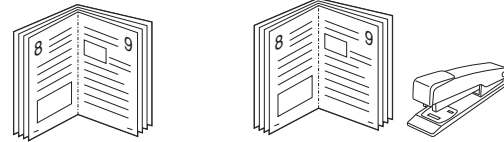
This printer feature allows you to print your document on both sides of the paper and arranges the pages so that the paper can be folded in half after printing to produce a booklet.

1 To change the print settings from your software application, access the printer properties. See "Printing a Document" on page 11.

2 From the **Layout** tab, choose **Booklet Printing** from the **Layout Type** drop-down list.

NOTE: The **Booklet Printing** option is not available for all paper sizes. In order to find out the available paper size for this feature, select the paper size in the **Size** option on the **Paper** tab, then check if the **Booklet Printing** in a **Layout Type** drop-down list on the **Layout** tab is activated.

3 Click the **Paper** tab, and select the paper source, size, and type.

4 Click **OK** and print the document.

5 After printing, fold and staple the pages.

Printing on Both Sides of Paper

You can print on both sides of a sheet of paper. Before printing, decide how you want your document oriented.

The options are:

- **Printer Setting**, if you select this option, this feature is determined by the setting you've made on the control panel of the printer.
- **None**
- **Long Edge**, which is the conventional layout used in book binding.
- **Short Edge**, which is the type often used with calendars.

▲ Long Edge   ▲ Short Edge

- **Reverse Duplex Printing**, allows you to select general print order compare to duplex print order.

NOTE: Do not print on both sides of labels, transparencies, envelopes, or thick paper. Paper jamming and damage to the printer may result.

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1 To change the print settings from your software application, access printer properties. "Printing a Document" on page 11.

2 From the **Layout** tab, select the paper orientation.

3 From the **Double-sided Printing** section, select the binding option you want.

4 Click the **Paper** tab and select the paper source, size, and type.

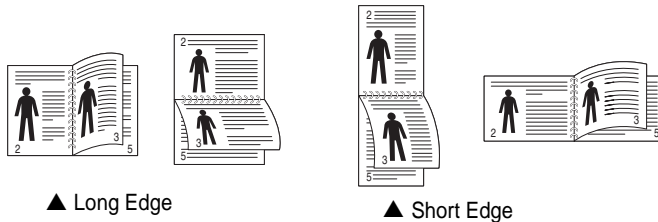**5** Click **OK** and print the document.

Printing a Reduced or Enlarged Document
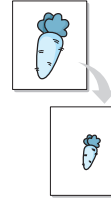
You can change the size of a page's content to appear larger or smaller on the printed page.

1 To change the print settings from your software application, access printer properties. See "Printing a Document" on page 11.

2 From the **Paper** tab, select **Reduce/Enlarge** in the **Printing Type** drop-down list.

3 Enter the scaling rate in the **Percentage** input box.

You can also click the ▼ or ▲ button.

4 Select the paper source, size, and type in **Paper Options**.

5 Click **OK** and print the document.

Fitting Your Document to a Selected Paper Size
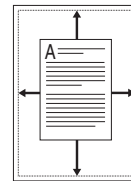
This printer feature allows you to scale your print job to any selected paper size regardless of the digital document size. This can be useful when you want to check fine details on a small document.

1 To change the print settings from your software application, access printer properties. See "Printing a Document" on page 11.

2 From the **Paper** tab, select **Fit to Page** in the **Printing Type** drop-down list.

3 Select the correct size from the **Output size** drop-down list.

4 Select the paper source, size, and type in **Paper Options**.

5 Click **OK** and print the document.

Using Watermarks

The Watermark option allows you to print text over an existing document. For example, you may want to have large gray letters reading "DRAFT" or "CONFIDENTIAL" printed diagonally across the first page or all pages of a document.

There are several predefined watermarks that come with the printer, and they can be modified, or you can add new ones to the list.

Using an Existing Watermark

1 To change the print settings from your software application, access printer properties. See "Printing a Document" on page 11.

2 Click the **Extras** tab, and select the desired watermark from the **Watermark** drop-down list. You will see the selected watermark in the preview image.

3 Click **OK** and start printing.

NOTE: The preview image shows how the page will look when it is printed.

Creating a Watermark

1 To change the print settings from your software application, access printer properties. See "Printing a Document" on page 11.

2 Click the **Extras** tab, and click the **Edit** button in the **Watermark** section. The **Edit Watermark** window appears.

3 Enter a text message in the **Watermark Message** box. You can enter up to 40 characters. The message displays in the preview window.

When the **First Page Only** box is checked, the watermark prints on the first page only.

4 Select watermark options.

You can select the font name, style, size, or grayscale level from the **Font Attributes** section and set the angle of the watermark from the **Message Angle** section.

5 Click **Add** to add a new watermark to the list.

6 When you have finished editing, click **OK** and start printing.

To stop printing the watermark, select **(No Watermark)** from the **Watermark** drop-down list.

Editing a Watermark

1 To change the print settings from your software application, access printer properties. See "Printing a Document" on page 11.

2 Click the **Extras** tab and click the **Edit** button in the **Watermark** section. The **Edit Watermark** window appears.

3 Select the watermark you want to edit from the **Current Watermarks** list and change the watermark message and options.

4 Click **Update** to save the changes.

5 Click **OK** until you exit the Print window.

Deleting a Watermark

1 To change the print settings from your software application, access printer properties. See "Printing a Document" on page 11.

2 From the **Extras** tab, click the **Edit** button in the Watermark section. The **Edit Watermark** window appears.

3 Select the watermark you want to delete from the **Current Watermarks** list and click **Delete**.

4 Click **OK** until you exit the Print window.

Using Overlays

What is an Overlay?

An overlay is text and/or images stored in the computer hard disk drive (HDD) as a special file format that can be printed on any document. Overlays are often used to take the place of preprinted forms and letterhead paper. Rather than using preprinted letterhead, you can create an overlay containing the exact same information that is currently on your letterhead. To print a letter with your company's letterhead, you do not need to load preprinted letterhead paper in the printer. You need only tell the printer to print the letterhead overlay on your document.

Creating a New Page Overlay
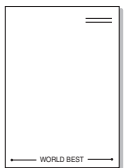
To use a page overlay, you must create a new page overlay containing your logo or image.

1 Create or open a document containing text or an image for use in a new page overlay. Position the items exactly as you wish them to appear when printed as an overlay.

2 To save the document as an overlay, access printer properties. See "Printing a Document" on page 11.

3 Click the **Extras** tab, and click **Edit** button in the **Overlay** section.

4 In the Edit Overlay window, click **Create Overlay**.

5 In the Create Overlay window, type a name of up to eight characters in the **File name** box. Select the destination path, if necessary. (The default is C:\Formover).

6 Click **Save**. The name appears on the **Overlay List** box.

7 Click **OK** or **Yes** to finish creating.

The file is not printed. Instead it is stored on your computer hard disk drive.

NOTE: The overlay document size must be the same as the documents you print with the overlay. Do not create an overlay with a watermark.

Using a Page Overlay

After an overlay has been created, it is ready to be printed with your document. To print an overlay with a document:

1 Create or open the document you want to print.

2 To change the print settings from your software application, access printer properties. See "Printing a Document" on page 11.

3 Click the **Extras** tab.

4 Select the desired overlay from the **Overlay** drop-down list box.

5 If the overlay file you want does not appear in the **Overlay** list, click **Edit** button and **Load Overlay**, and select the overlay file.

If you have stored the overlay file you want to use in an external source, you can also load the file when you access the **Load Overlay** window.

After you select the file, click **Open**. The file appears in the **Overlay List** box and is available for printing. Select the overlay from the **Overlay List** box.

6 If necessary, click **Confirm Page Overlay When Printing**. If this box is checked, a message window appears each time you submit a document for printing, asking you to confirm your wish to print an overlay on your document.

If this box is not checked and an overlay has been selected, the overlay automatically prints with your document.

7 Click **OK** or **Yes** until printing begins.

The selected overlay downloads with your print job and prints on your document.

NOTE: The resolution of the overlay document must be the same as that of the document you will print with the overlay.

Deleting a Page Overlay

You can delete page overlays that you no longer use.

1 In the printer properties window, click the **Extras** tab.

2 Click the **Edit** button in the **Overlay** section.

3 Select the overlay you want to delete from the **Overlay List** box.

4 Click **Delete Overlay**.

5 When a confirming message window appears, click **Yes**.

6 Click **OK** until you exit the Print window.

4 Using Windows PostScript Driver

If you want to use the PostScript driver provided with the supplied CD-ROM to print a document.

PPDs, in combination with the PostScript driver, access printer features and allow the computer to communicate with the printer. An installation program for the PPDs is provided on the supplied CD-ROM.

Printer Settings

You can use the printer properties window, which allows you to access all of the printer options you need when using your printer. When the printer properties are displayed, you can review and change the settings needed for your print job.

Your printer properties window may differ, depending on your operating system. This Software User's Guide shows the Properties window for Windows XP.

Your printer driver **Properties** window that appears in this User's Guide may differ depending on the printer in use.

NOTES:
- Most Windows applications will override settings you specify in the printer driver. Change all print settings available in the software application first, and change any remaining settings using the printer driver.
- The settings you change remain in effect only while you are using the current program. **To make your changes permanent**, make them in the Printers folder.
- The following procedure is for Windows XP. For other Windows OS, refer to the corresponding Windows User's Guide or online help.
  1. Click the Windows **Start** button.
  2. Select **Printers and Faxes**.
  3. Select **your printer driver icon**.
  4. Right-click on the printer driver icon and select **Printing Preferences**.
  5. Change the settings on each tab, click OK.

Advanced

You can use advanced settings by clicking the **Advanced** button.
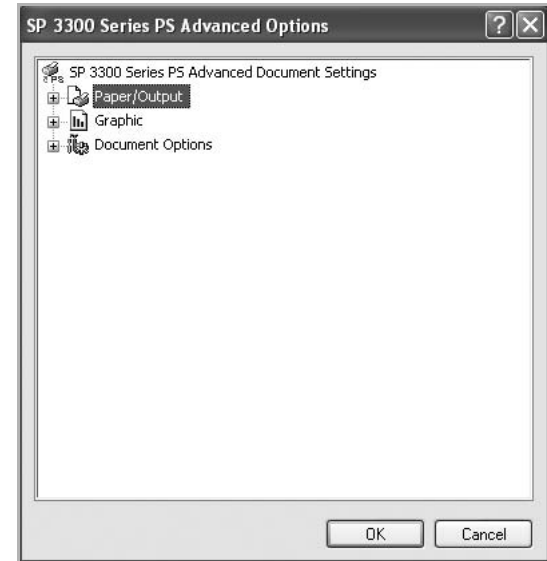
- **Paper/Output** this option allows you to select the size of the paper loaded in the tray.
- **Graphic** this option allows you to adjust the print quality for your specific printing needs.
- **Document Options** this options allow you to set the PostScript options or printer features.

Using Help

You can click ? from the upper right corner of the window, and then click on any setting.

5 Sharing the Printer Locally

You can connect the printer directly to a selected computer, which is called "host computer," on the network.

The following procedure is for Windows XP. For other Windows OS, refer to the corresponding Windows User's Guide or online help.

NOTES:
- Check the Operating System(s) that are compatible with your printer. Please refer to the OS Compatibility section of Printer Specifications in your Printer User Guide.
- If you need to know the exact name of your printer, you can check the supplied CD-ROM.

Setting Up a Host Computer

1. Start Windows.

2. From the **Start** menu select **Printers and Faxes**.

3. Double-click **your printer driver icon**.

4. From the **Printer** menu, select **Sharing**.

5. Check the **Share this printer** box.

6. Fill in the **Shared Name** field, and then click **OK**.

Setting Up a Client Computer

1. Right-click the Windows **Start** button and select **Explore**.

2. Select **My Network Places** and then right-click **Search for Computers**.

3. Fill in the IP address of host computer in **Computer name** field, and click **Search**. (In case host computer requires **User name** and **Password**, fill in User ID and password of host computer account.)

4. Double-click **Printers and Faxes**.

5. Right-click printer driver icon, select **Connect**.

6. Click **Yes**, if the installation confirm message appears.

6 Using Utility Applications

If an error occurs while printing, the Status Monitor window appears, showing the error.

NOTES:
- To use this program, you need:
  - To check for Operating System(s) that are compatible with your printer, refer to Printer Specifications in your Printer User Guide.
  - MAC OS X 10.3 or higher
  - Internet Explorer version 5.0 or higher for flash animation in HTML Help.
- If you need to know the exact name of your printer, you can check the supplied CD-ROM.

Using Printer Settings Utility

Using the Printer Settings Utility, you can configure and check print settings.

1 For Windows, from the **Start** menu, select **Programs** or **All Programs** → **SP 3300 Series** → **Printer Settings Utility**.

For MAC OS X, open the **Applications** folder → **RNP** → **SP 3300 Series** → **Printer Settings Utility**.

2 Change the settings.

3 To send the changes to the printer, click the **Apply** button.

NOTE: If you connect your printer to a network, the **Web Image Monitor SP 3300 Series** window appears instead of the Printer Settings Utility window.

Using Onscreen Help

For more information about **Printer Settings Utility**, click ⊘ .

Opening the Troubleshooting Guide

Using the troubleshooting guide, you can view solutions for error status problems.

Double click the Status Monitor icon on the Windows task bar.
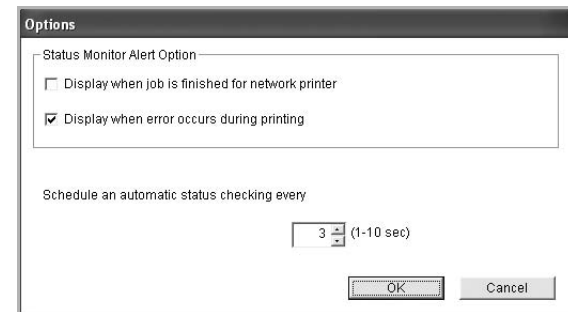
Double click this icon.

Or, from the **Start** menu, select **Programs** or **All Programs** → **SP 3300 Series** → **Troubleshooting Guide**.

Changing the Status Monitor Program Settings

Select the Status Monitor icon on the Windows task bar and right-click the Status Monitor icon. Select **Options**.

The following window opens.

- **Display when job is finished for network printer** shows the Status Monitor balloon when your job is complete.
- **Display when error occurs during printing** shows the Status Monitor balloon when an error occurs during printing.
- **Schedule an automatic status checking every** allows the computer to update the printer status regularly. Setting the value close to 1 second causes the computer to check the printer status more frequently, thereby allowing a faster response to any printer error.

7 Using Your Printer with a Macintosh

Your machine supports Macintosh systems with a built-in USB interface or a 10/100 Base-TX network interface card. When you print a file from a Macintosh computer, you can use the PostScript driver by installing the PPD file.

This chapter includes:

- **Installing Software**
- **Setting Up the Printer**
- **Printing**

Installing Software

The supplied CD-ROM that came with your machine provides you with the PPD file to use the PS driver, Apple LaserWriter driver, for printing on a Macintosh computer.

Printer driver

Installing the printer driver

1. Connect your machine to the computer using the USB cable or the Ethernet cable.

2. Turn on your computer and the machine.

3. Insert the supplied CD-ROM which came with your machine into the CD-ROM drive.

4. Double-click the **SP 3300 Series** on your Macintosh desktop.

5. Double-click the **MAC_Installer** folder.

6. Double-click the **MAC_Printer** folder.

7. For Mac OS 8.6~9.2, double-click the **SP 3300 Series Installer Classic** icon.

   For Mac OS 10.1 or higher, double-click the **SP 3300 Series Installer OSX** icon.

8. Click **Continue**.

9. Click **Install**.

10. After the installation is finished, click **Quit**.

Uninstalling the printer driver

1. Insert the supplied CD-ROM which came with your machine into the CD-ROM drive.

2. Double-click the **SP 3300 Series** on your Macintosh desktop.

3. Double-click the **MAC_Installer** folder.

4. Double-click the **MAC_Printer** folder.

5. For Mac OS 8.6~9.2, double-click the **SP 3300 Series Installer Classic** icon.

   For Mac OS 10.1 or higher, double-click the **SP 3300 Series Installer OSX** icon.

6. Select **Uninstall** and then click **Uninstall**.

7. Click **Continue**.

8. When the uninstallation is done, click **Quit**.

Setting Up the Printer

Set up for your printer will be different depending on which cable you use to connect the printer to your computer—the network cable or the USB cable.

For a Network-connected

Mac OS 8.6 ~ 9.2

1 Follow the instructions on "Installing Software" on page 25 to install the PPD file on your computer.

2 From the **Apple** menu, select **Chooser**.

3 Click **LaserWriter 8** (the PostScript driver provided with your Macintosh).

The name of your machine appears on the list.

4 Select **RFG000xxxxxxxxx** from the printer box (where the xxxxxxxxx varies depending on each of the machines) and Click **Select**.

If Auto Setup does not work properly, click **Select PPD**, choose **your printer name**, and click **OK**.

5 When the setup is complete, you see your machine icon created as a desktop printer.

6 Close the **Chooser**.

7 When a message window appears telling you that you have changed your current machine, click **OK**.

Mac OS 10.1 or higher

1 Follow the instructions on "Installing Software" on page 25 to install the PPD file on your computer.

2 Open the **Applications** folder → **Utilities**, and **Print Setup Utility**.
- For MAC OS 10.5, open **System Preferences** from the **Applications** folder, and click **Printer & Fax**.

3 Click **Add** on the **Printer List**.
- For MAC OS 10.5, press the "**+**" icon then a display window will pop up.

4 For MAC OS 10.3, select the **Rendezvous** tab.
- For MAC OS 10.4, click **Default Browser** and find the **Bonjour**.
- For MAC OS 10.5, click **Default** and find the **Bonjour**.

The name of your machine appears on the list. Select **RFG000xxxxxxxxx** from the printer box, where the **xxxxxxxxx** varies depending on your machine.

5 For MAC OS 10.3, if Auto Select does not work properly, select **SP 3300 Series** in **Printer Model** and **your printer name** in **Model Name**.

- For MAC OS 10.4, if Auto Select does not work properly, select **SP 3300 Series** in **Print Using** and **your printer name** in **Model**.
- For MAC OS 10.5, if Auto Select does not work properly, select **Select a driver to use...** and **your printer name** in **Print Using**.

Your machine appears on the Printer List and is set as the default printer.

6 Click **Add**.

For a USB-connected

Mac OS 10.1 or higher

1 Follow the instructions on "Installing Software" on page 25 to install the PPD file on your computer.

2 Open the **Applications** folder → **Utilities**, and **Print Setup Utility**.
- For MAC OS 10.5, open **System Preferences** from the **Applications** folder, and click **Printer & Fax**.

3 Click **Add** on the **Printer List**.
- For MAC OS 10.5, press the "**+**" icon then a display window will pop up.

4 For MAC OS 10.3, select the **USB** tab.
- For MAC OS 10.4, click **Default Browser** and find the USB connection.
- For MAC OS 10.5, click **Default** and find the USB connection.

5 Select **your printer name**.

6 For MAC OS 10.3, if Auto Select does not work properly, select **SP 3300 Series** in **Printer Model** and **your printer name** in **Model Name**.
- For MAC OS 10.4, if Auto Select does not work properly, select **SP 3300 Series** in **Print Using** and **your printer name** in **Model**.
- For MAC OS 10.5, if Auto Select does not work properly, select **Select a driver to use...** and **your printer name** in **Print Using**.

Your machine appears on the Printer List and is set as the default printer.

7 Click **Add**.

Printing

Printing a Document

When you print with a Macintosh, you need to check the printer software setting in each application you use. Follow these steps to print from a Macintosh.

1 Open a Macintosh application and select the file you want to print.

2 Open the **File** menu and click **Page Setup** (**Document Setup** in some applications).

3 Choose your paper size, orientation, scaling, and other options and click **OK**.
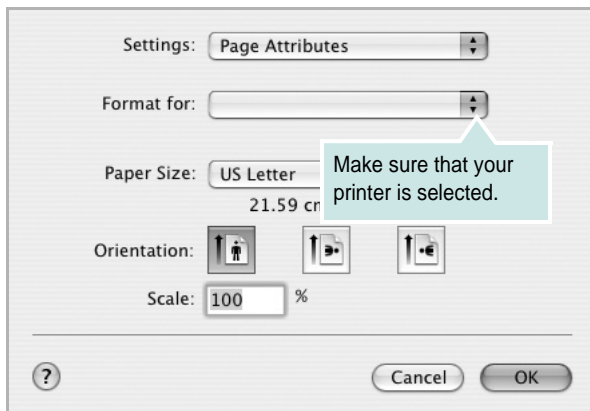
▲ Mac OS 10.3

4 Open the **File** menu and click **Print**.

5 Choose the number of copies you want and indicate which pages you want to print.

**6** Click **Print** when you finish setting the options.

Changing Printer Settings

You can use advanced printing features when using your printer.

From your Macintosh application, select **Print** from the **File** menu.

NOTE: The setting options may differ depending on Macintosh OS version.

Layout

The **Layout** tab provides options to adjust how the document appears on the printed page. You can print multiple pages on one sheet of paper. Select **Layout** from the **Presets** drop-down list to access the following features.
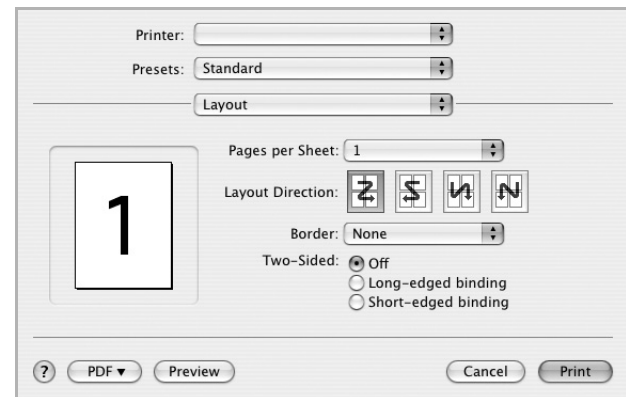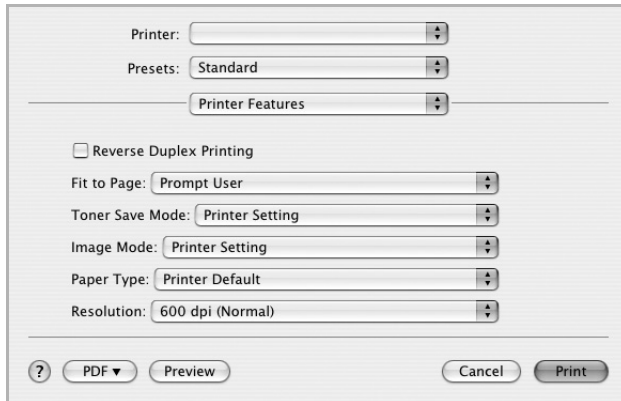

▲ Mac OS 10.4

- **Pages per Sheet**: This feature determines how many pages printed on one page. For details, see "Printing Multiple Pages on One Sheet of Paper (N-Up Printing)" on the next column.
- **Layout Direction**: You can select the printing direction on a page as like the examples on UI.

Printer Features

This tab provides options for selecting the paper type and adjusting print quality. Select **Printer Features** from the **Presets**' drop-down list to access the following features:
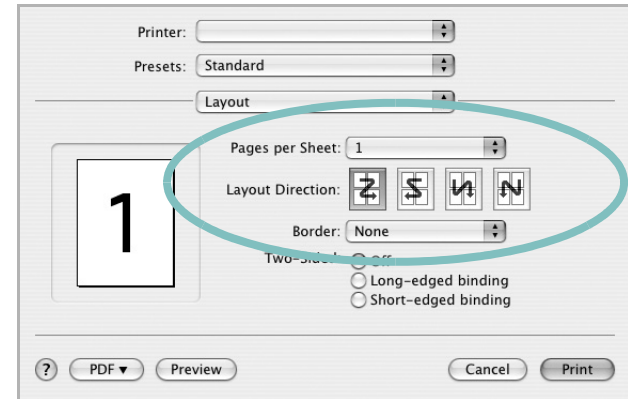

▲ Mac OS 10.4

- **Reverse Duplex Printing**: Allows you to select general print order compare to duplex print order.
- **Fit to Page**: This setting allows you to scale your print job to any selected paper size regardless of the digital document size. This can be useful when you want to check fine details on a small document.
- **Toner Save Mode**: Selecting this option extends the life of your toner cartridge and reduces your cost per page without a significant reduction in print quality.
- **Image Mode**: Image Mode allows the user to enhance printouts. The available options are Normal and Text Enhance.
- **Paper Type**: Set **Paper Type** to correspond to the paper loaded in the tray from which you want to print. This will let you get the best quality printout. If you load a different type of print material, select the corresponding paper type.
- **Resolution**: You can select the printing resolution. The higher the setting, the sharper the clarity of printed characters and graphics. The higher setting also may increase the time it takes to print a document.

Printing Multiple Pages on One Sheet of Paper (N-Up Printing)

You can print more than one page on a single sheet of paper. This feature provides a cost-effective way to print draft pages.

1 From your Macintosh application, select **Print** from the **File** menu.

2 Select **Layout**.

▲ Mac OS 10.4

3 Select the number of pages you want to print on one sheet of paper on the **Pages per Sheet** drop-down list.

4 Select the page order from the **Layout Direction** option.

To print a border around each page on the sheet, select the option you want from the **Border** drop-down list.

5 Click **Print**, and the printer prints the selected number of pages on one side of each page.
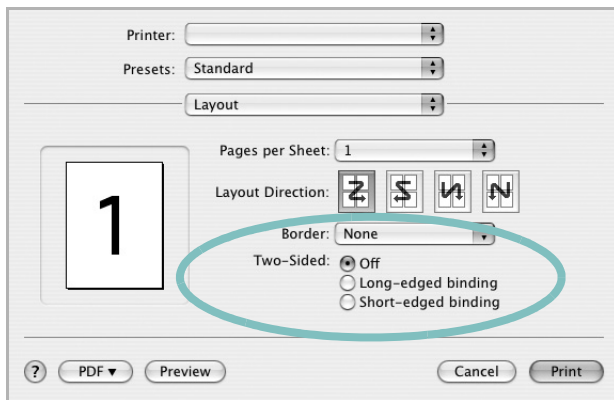
Duplex Printing

You can print on both sides of the paper. Before printing in the duplex mode, decide on which edge you will be binding your finished document. The binding options are:

Long-edge binding: Which is the conventional layout used in book binding.

Short-edge binding: Which is the type often used with calendars.

1 From your Macintosh application, select **Print** from the **File** menu.

2 Select the **Layout**.

▲ Mac OS 10.3

3 Select a binding orientation from **Two-Sided** option.

4 Click **Print** and the printer prints on both sides of the paper.

NOTE: If you have selected duplex printing and then try to print multiple copies of a document, the printer may not print the document in the way you want. In case of "Collated copy", if your document has odd pages, the last page of the first copy and the first page of the next copy will be printed on the front and back of one sheet. In case of "Uncollated copy", the same page will be printed on the front and back of one sheet. Therefore, if you need multiple copies of a document and you want those copies on both sides of the paper, you must print them one at a time, as separate print jobs.

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    create 20
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Network Printer User's Guide
(SP 3300DN only)

OpenSSL License

Original SSLeay License

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5. EtherTalk environment

6. Administration Tools

7. Appendix

1 **Getting started**

Introduction

The Network Printer Card allows you to connect your printer directly to a network to share the printer among multiple users. The printer functions as a network print server supporting various network environments, such as Windows 2000/XP/Vista, Windows Server 2003, and Macintosh 8.6 or higher.

This guide explains how to connect the Network Printer Card and set up your printer as a print sever over the network.

This guide assumes that you have:

- A good working knowledge of your network utilities
- A supported network operating system
- A fully operational computer system
- Access to the supervisor account as a network administrator, or access to an account that has supervisor and print server operator privileges

Supported network environments

Administrators and users can configure, and use printers on the following supported network operating systems:

Operating system	Network environment	Printing protocol	Action
Windows	2000, XP, Vista, Server 2003	TCP/IP, EtherTalk, SNMP, HTTP 1.1	See Chapter 3, "Print Driver Installation for Networked Printers."
Macintosh	Macintosh 8.6 ~ 9.2, 10.1 ~ 10.5, or higher	TCP/IP, EtherTalk, SNMP, HTTP 1.1, Bonjour	See Chapter 5, "EtherTalk environment."

Note: Your printer may not support all of the listed computing environments (operating systems). Therefore, check the network environment your printer supports in the user's guide that came with the printer.

Network Printer Card

System requirements

The following hardware is required to configure your printer for network applications.

Computer	Requirements
IBM - compatible PC	• 80486 CPU or higher • Minimum of 16 MB of RAM • 2 MB of free disk space
Macintosh	• PowerPC 68020 or higher • Minimum of 8 MB of RAM • 2 MB of free disk space

Connecting your Network Printer Card

1 Use a twisted pair cable with an RJ-45 connector to connect the printer to your network.

Once a connection is established between the wired network printer card and your network, the link LEDs on the card light.

Link LED: Lights when the printer card is connected to the network.

Activity LED: Blinks when data packets are being transferred.
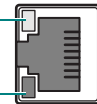
2 Set up your printer's IP address. See "IP address setup" on page 2.2.

2 Programs supplied on the CD

The CD-ROM supplied with your printer card provides you with:

- **Set IP**: A utility program allowing you to select a network printer card and manually configure the addresses for use with the TCP/IP protocol.

System requirements

To install SetIP, one of the following operating systems is required:

- Operating system: Windows 2000/XP/Vista/Windows Server 2003, MAC OS 10.3~10.5

Installing software

1 Insert the supplied CD-ROM into your CD-ROM drive.

   The CD-ROM should automatically run, and an installation window appears.

   If the installation window does not appear, click **Start** > **Run**. Type **X:\Setup.exe**, replacing "**X**" with the letter which represents your drive and click **OK**.

   If you use Windows Vista, click **Start** > **All Programs** > **Accessories** > **Run**, and type **X:\Setup.exe**.

   If the **AutoPlay** window appears in Windows Vista, click **Run Setup.exe** in **Install or run program** field, and click **Continue** in the **User Account Control** window.

2 Click **Next**.

3 Select the language you want.

4 Click **Typical installation for a network printer**.

5 Follow the onscreen instructions to complete installation.

6 Click **Finish** when installation is done.

Uninstalling software

You should remove the Network utilities if you are upgrading the software or if the installation fails.

Note: Close all programs before uninstalling software.

1 Click **Start** > **Programs** > **SP 3300 Series** > **Set IP** > **Set IP**.

2 Click **OK** to confirm uninstallation.

3 Click **Finish** when uninstallation is done.

IP address setup

Before using your network print server in your network, you must set TCP/IP addresses for the print server. You will need your printer card's MAC address, IP address, subnet mask, and gateway address. First, check with your network administrator for the TCP/IP addresses.

Note: The MAC address is the hardware serial number of the network printer card. You can check the address by printing the Network Printer Configuration Page. For printing the page, refer to your printer user's guide.

You can set your print server's IP address via the following methods:

- **Set IP** program: Go to the Using SetIP.

- **Web Image Monitor SP 3300 Series**: Once you have set an IP address for your network print server, you can use the embedded web server in the network printer card to change the address. Go to next column.

- DHCP: You can use Dynamic Host Configuration Protocol (DHCP) to get an IP address automatically assigned by your network administrator, if your network system supports this protocol.s

- BOOTP: A network-based server using the BootStrap protocol (BOOTP) can notify the network printer card of its assigned IP address each time the printer turns on, if your network system supports this protocol.

Note: To get an IP address from the DHCP or BOOTP server, the IP assignment method must be set to DHCP or BOOTP.

Using SetIP

Windows

1   From the **Start** menu, select **Programs** or **All Programs** > **SP 3300 Series** > **Set IP**.

The program automatically detects and displays new and configured print servers on your network.
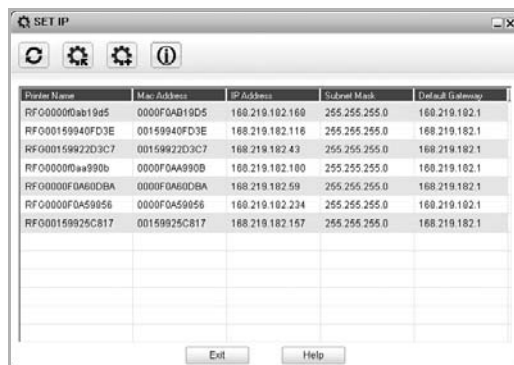
2   Select the name of your printer and click 🔧 . If you cannot find your printer name, click 🔄 to refresh the list.

Even with this step, if you cannot find your printer name, then contact Network Administrator.

3   Enter your network printer card's MAC address (hardware address), IP address, subnet mask, default gateway, and then click **Apply**.

4   Click **OK** to confirm the settings.

5   Click **Exit** to close the SetIP program.

MAC OS X

If you want to change your network printer IP setting, follow the below instruction.

1   Printer the machine's network information report which includes your machine's MAC address.

2   Open the **Library** folder > **Printers** > **RFG** > **your printer model name** > **Set IP**.

3   Double click the **SetIPApplet.html** file.

Using Web Image Monitor SP 3300 Series

1   Run your web browser.

2   Enter your print server's IP address in the URL field and click **Go**.

3   Click **Network Settings** > **TCP/IP**.

4   Select **Static** from **IP Address Assignment Method**.
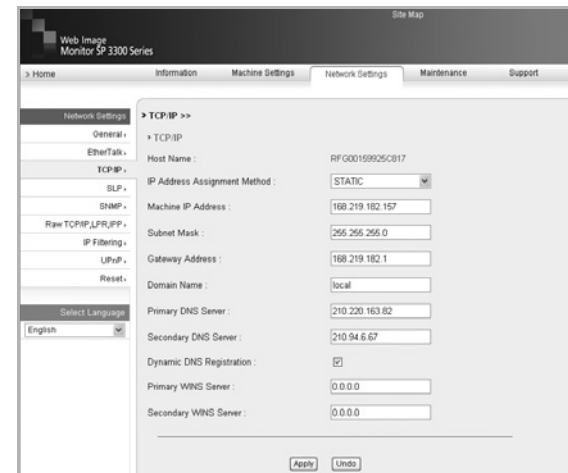
5   Enter your print server's TCP/IP addresses and click **Apply**.

3 Print Driver Installation for Networked Printers

This chapter explains how to install the print drivers for networked printers.

Workstation Setup

This section includes the setup procedures for the various Windows workstation environments.

Windows Vista (TCP/IP)

Note: Windows Vista supports printing via TCP/IP as standard when TCP/IP is installed on a Windows Vista Workstation.

Use the **AutoPlay** to add the printer to the network.

1   Select **Start**, select **Control Panel** > **Hardware and Sound** > **Printers**.

    Double-click on the **Add a printer** icon to display the Add Printer Wizard.

2   Select **Add a printer**, uncheck the box labelled **Automatically detect and install my Plug and Play printer.**and then select **Next** to display the dialog box listing available ports.

3   Select **Create a new port** to display the Printer Ports dialog box.

    Select **Standard TCP/IP Port** and select **Next** to display the Add Standard TCP/IP Port dialog box.

    Enter the IP Address of the printer in the **Printer Name or IP Address** field (you can optionally enter a friendly name for the printer port you are creating or use the default name created). Then select **Next** to continue.If the network printer settings are not automatically detected, click on the **Custom** button to setup the network printer port settings.

    It is recommended that you select **Raw** as the Print Protocol.

    If you prefer to use LPR:

    Select **LPR** as the Print Protocol.

    Enter **lp** (in lower case) in the **Queue Name** field.

    Uncheck the box labelled **LPR Byte Counting Enabled**.

    Check the box labelled **SNMP Status Enabled**.

    The **Community Name** should normally be set to "public" (unless you have configured the device to have a custom SNMP community name) and the **SNMP Device Index should be set to 1.**

Select **OK**.

4   The Add Printer Wizard will then request that you select the driver to be used for this printer.

    Insert the supplied CD-ROM into the workstation and select **Have Disk**.

    Browse to the required Windows Vista driver on the CD-ROM and select **OK**.

Note: The driver will be found in the **Printer** folder on the CD in the appropriate PCL folder. The driver is identified by the file extension **.inf**.

    Select **Next**, and select **Next** again and the printer driver will be loaded onto the workstation.

    Enter the Printer Name and select **Next**.

5   If you wish to share the printer over the network Select **Share name**. You may also wish to install printer drivers for other operating systems that will access the printer.

    A dialog box will be displayed with a message regarding the printing of a test page.

    Select **Finish** to accept the **Yes** choice.

6   Continue with **Test Print**.

Windows XP (TCP/IP)

Note: Windows XP supports printing via TCP/IP as standard when TCP/IP is installed on a Windows XP Workstation.

Use the **Add Printer Wizard** to add the printer to the network.

1   Select **Start**, select **Printers and Faxes**.

    Double-click on the **Add a printer** icon to display the Add Printer Wizard.

2   Select **Add a printer**, uncheck the box labelled **Automatically detect and install my Plug and Play printer.**and then select **Next** to display the dialog box listing available ports.

3   Select **Create a new port** to display the Printer Ports dialog box.

    Select **Standard TCP/IP Port** and select **Next** to display the Add Standard TCP/IP Port dialog box.

    Enter the IP Address of the printer in the **Printer Name or IP Address** field (you can optionally enter a friendly name for the printer port you are creating or use the default name created). Then select **Next** to continue.If the network printer settings are not automatically detected, click on the **Custom** button to setup the network printer port settings.

    It is recommended that you select **Raw** as the Print Protocol.

    If you prefer to use LPR:

    Select **LPR** as the Print Protocol.

Enter **lp** (in lower case) in the **Queue Name** field.

Uncheck the box labelled **LPR Byte Counting Enabled**.

Check the box labelled **SNMP Status Enabled**.

The **Community Name** should normally be set to "public" (unless you have configured the device to have a custom SNMP community name) and the **SNMP Device Index should be set to 1.**

Select **OK**.

4 The Add Printer Wizard will then request that you select the driver to be used for this printer.

Insert the supplied CD-ROM into the workstation and select **Have Disk**.

Browse to the required Windows XP driver on the CD-ROM and select **OK**.

Note: The driver will be found in the **Printer** folder on the CD in the appropriate PCL folder. The driver is identified by the file extension **.inf**.

Select **Next**, and select **Next** again and the printer driver will be loaded onto the workstation.

Enter the Printer Name and select **Next**.

5 If you wish to share the printer over the network Select **Share name**. You may also wish to install printer drivers for other operating systems that will access the printer.

A dialog box will be displayed with a message regarding the printing of a test page.

Select **Finish** to accept the **Yes** choice.

6 Continue with **Test Print**.

Windows 2000 (TCP/IP)

Note: Windows 2000 supports printing via TCP/IP as standard when TCP/IP is installed on a Windows 2000 Workstation.

Use the Add Printer Wizard to add the printer to the network.

1 Select **Start**, select **Settings**, and then select **Printers**.

Double-click on the **Add printer** icon to display the Add Printer Wizard.

2 Select **Local printer**, uncheck the box labelled **Automatically detect and install my Plug and Play printer.**and then select [Next] to display the dialog box listing available ports.

3 Select **Create a new port** to display the Printer Ports dialog box.

Select **Standard TCP/IP Port** and select **Next** to display the Add Standard TCP/IP Port dialog box.

Enter the IP Address of the printer in the **Printer Name or IP Address** field (you can optionally enter a friendly name for the printer port you are creating or use the default name created). Then select **Next** to continue.

If the network printer settings are not automatically detected, click on the **Custom** button to setup the network printer port settings.

It is recommended that you select **Raw** as the Print Protocol.If you prefer to use LPR:

Select **LPR** as the Print Protocol.

Enter **lp** (in lower case) in the **Queue Name** field.

Uncheck the box labelled **LPR Byte Counting Enabled**.

Check the box labelled **SNMP Status Enabled**.

The **Community Name** should normally be set to "public" (unless you have configured the device to have a custom SNMP community name) and the **SNMP Device Index should be set to 1.**

Select **OK**.

4 The Add Printer Wizard will then request that you select the driver to be used for this printer.

Insert the supplied CD-ROM into the workstation and select **Have Disk**.

Browse to the required Windows 2000 driver on the CD-ROM and select **OK**.

Note: The driver will be found in the **Printer** folder on the CD in the appropriate PCL folder. The driver is identified by the file extension **.inf**.

Select **Next**, and select **Next** again and the printer driver will be loaded onto the workstation.

Enter the Printer Name and select **Next**.

5 If you wish to share the printer over the network Select **Share name**. You may also wish to install printer drivers for other operating systems that will access the printer.

6 If you wish to share the printer over the network Select **Share as**. You may also wish to install printer drivers for other operating systems that will access the printer.

A dialog box will be displayed with a message regarding the printing of a test page.

Select **Finish** to accept the **Yes** choice.

7 Continue with **Test Print**.

Test Print

To ensure the printer has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps:

1   Open a document on a client workstation.

2   Select the **SP 3300 Series** as the printer for sending documents to.

3   Print the document on the device and verify that it prints correctly.

4   Ensure the print driver is installed on every workstation that will be sending jobs to the device.

5   Repeat the test for all workstations that will be sending jobs to the device.

4 TCP/IP environment

A TCP/IP network provides you with various protocols for using printing devices and managing various types of networked devices.

In this chapter, you will learn which management protocols are available in TCP/IP network environments, and how to print via your network print server using TCP/IP protocol.

Management protocols

Before beginning to print documents via your network printer, you need to check or configure some parameters using management protocols.

DHCP/BOOTP

Dynamic Host Configuration Protocol (DHCP) is a communication protocol enabling network administrators to centrally manage and to automate the assignment of IP addresses in a network. In an IP network, each device needs a unique IP address. DHCP lets a network administrator supervise and distribute IP addresses from a central point and automatically sends a new IP address when a device is plugged into a different place in the network.

Bootstrap Protocol (BOOTP) is UDP/IP-based protocol which allows a booting host to configure itself dynamically and without user supervision. BOOTP provides means to notify a host of its assigned IP address, the IP address of a boot server host, and other configuration information, such as the local subnet mask, the local time offset, and the addresses of default routers. Addresses of various Internet servers can also be transferred to a host using BOOTP.

DHCP is active by factory default on your network print server. After boot up, the network print server will get an IP address automatically from the DHCP server, if one exists. To set an IP address manually, see page 2.2.

Configuring DHCP/BOOTP

To enable or disable DHCP/BOOTP, use one of the following methods:

- **Web Image Monitor SP 3300 Series**: Select **Network Settings** > **TCP/IP** and select **DHCP** or **BOOTP** from the IP Address Assignment Method list.

HTTP

Hypertext Transfer Protocol (HTTP) is an application layer protocol for distributed, collaborative, hypermedia information systems. It is a generic, stateless protocol which can be used for many tasks beyond its use for hypertext, such as with name servers and distributed object management systems. You are using HTTP when you connect your network printer via a web browser.

The Network Printer Card has a built-in web server, Web Image Monitor SP 3300 Series. You can configure and manage your network print server through Web Image Monitor SP 3300 Series using HTTP over TCP/IP.

SNMP

Simple Network Management Protocol (SNMP), which is part of the TCP/IP protocol suite, is an application layer protocol that facilitates the exchange of management information between network devices. It enables network administrators to remotely monitor and configure network devices, find and solve network problems, and plan for network growth.

Network devices are monitored and controlled using four basic SNMP commands:

- **read**: is used by a Network Management server to monitor network devices. The server examines different variables that are maintained by the devices.

- **write**: is used by a Network Management server to control managed devices. The server changes the values of variables stored within the devices.

- **trap**: is used by network devices to asynchronously report events to a Network Management server. When certain types of events occur, a device sends a trap to the specified server.

- **Traversal operations**: are used by a Network Management server to determine which variables a network device supports and to sequentially gather information in variable tables, such as a routing table.

Configuring SNMP

To access your network print server using SNMP, Community Name/ Access Permission pair must be properly specified. There are two access permission: read and write.

Assign the IP addresses of trap hosts and community names (IP addresses) of network devices in Web Image Monitor SP 3300 Series; select **Network Settings** > **SNMP**.

Using SNMP

Web Image Monitor SP 3300 Series accesses, configures, and manages network devices using SNMP. You can use other MIB (Management Information Base) browser software, which allows you to access management information gathered from network devices.

SLP

Service Location Protocol (SLP) is an Internet standard network protocol that provides a framework to allow networking applications to discover the existence, location, and configuration of networked services in enterprise networks, such as printers, Web servers, fax machines, video cameras, file systems, backup devices (tape drives), databases, directories, mail servers, and calendars.

In order to locate services on the network, users of network applications are required to supply the host name or network address of the device that supplies a desired service. However, SLP eliminates the need for a user to know the name of a network host supporting a service. Rather, the user only needs to supply the desired type of service and set of attributes or keywords, which describe the service.

Based on that description, SLP also resolves the network address of the service of the user. Administrators do not need to help clients find new services or to remove services when they are no longer available. SLP uses multicasting and can work over subnet boundaries.

Configuring SLP

You can configure SLP protocol settings through Web Image Monitor SP 3300 Series. Select **Network Settings** > **SLP**.

- **SLP Protocol**: You can enable or disable SLP.

- **Port Number**: The port number is fixed to 427.

- **Scope 1 ~ 3**: A scope is a set of services and a string used to group resources by location, network, or administrative category. Each scope should not be more than 32 characters.

- **Message Type**: You can select the outgoing SLP message type sent to network devices. The default value is **Multicast**.

- **Multicast Radius**: You can specify the maximum number of subnets that SLP multicasts can travel across. This value is also called the "hop count" or "time-to-live" (TTL). The default value is 255.

- **Registration Lifetime**: You can define the time in seconds before the Server Agents registration expires.

- **Multicast Address**: The Multicast Address value is fixed to 239.255.255.253, 224.0.1.127.

Using SLP

Once **Enabled** is checked, the network print server works as a Service Agent and the User Agent.

Dynamic DNS (DDNS)

DNS (Domain Name System) is used for registration of domain names and provides Host names to an IP address resolution service. For printer devices, DNS may be utilised for printer domain name registration, so that print server clients may refer to the printer by its host name rather than by its IP address. Even though a printer's IP address is changed, all clients can operate this printer without reconfiguration. Addressing to a printer device by IP address is not convenient and may often go stale if an IP address to a device is assigned dynamically via a DHCP server. If

the DHCP server can provide information about a printer's changing IP address to the DNS server automatically, user convenience is increased. The printer's name will be used as its DNS name.

Configuring DDNS

1 Let the DHCP server provide updated information to the DNS server.

2 Configure the same DDNS domain through Web Image Monitor SP 3300 Series as entered in the DNS server.

If you connect your network printer via a web browser, you can enable this by selecting **Network Settings** > **TCP/IP** > **Dynamic DNS Registration**.

3 Set the IP assignment method of your network print server to **DHCP** and reboot the printer.

The DNS server will update its database and users can use the printer's name instead of its IP address.

WINS

Before Dynamic DNS was defined, DNS could only be updated manually when DHCP servers automatically provided (or removed) IP addresses. As a result, DNS servers often contained obsolete listings. In response, Microsoft developed Windows Internet Name Service (WINS) to solve this problem for NetBIOS names.

Microsoft now recommends moving to Dynamic DNS and away from WINS. However, many customers including Microsoft maintain WINS systems and need devices to interoperate with WINS. So devices must, at least for now, support WINS interoperability to allow for dynamic NetBIOS name to IP address registration and resolution.

WINS provides a distributed database for registering and querying dynamic NetBIOS names to IP address mapping in a routed network environment. This is the best choice for NetBIOS name resolution in such a routed network because it is designed to solve the problems that occur with name resolution in complex Internet networks.

Configuring WINS

Access Web Image Monitor SP 3300 Series and select **Network Settings** > **TCP/IP**. You will configure two WINS server addresses, the Primary WINS Server or the Secondary WINS Server. The default value is 0.0.0.0.

In a DHCP server

A DHCP server can support the NBNS (NetBIOS Name Server) option. An administrator has to set the WINS server IP address in the NBNS option.

1 Set the IP assignment method of your network print server to **DHCP**.

2 Reboot the print server.

The WINS server will update the printer's NetBIOS name in its database. Users can use the printer name instead of its IP address.

In the network print server

1 Configure the WINS server address through Web Image Monitor SP 3300 Series.

2 Reboot the print server.

The WINS server will update the printer's NetBIOS name in its database. Users can use the printer name instead of its IP address.

Bonjour

Bonjour allows for a network system to be easily discovered and its capabilities to be revealed by any Bonjour-compliant client software, such as Print Center Utility built in to Mac OS X. For details, see page 5.2.

UPnP

UPnP is an architecture for pervasive peer-to-peer network connectivity of intelligent appliances, wireless devices, and PCs of all form factors. It is designed to bring easy-to-use, flexible, standards-based connectivity to ad-hoc or unmanaged networks whether in the home, in a small business, public spaces, or attached to the Internet.

UPnP is a distributed, open networking architecture that leverages TCP/IP and Web technologies to enable seamless proximity networking in addition to control and data transfer among networked devices in the home, office, and public spaces.

UPnP is more than just a simple extension of the plug and play peripheral model. It is designed to support zero-configuration, "invisible" networking, and automatic discovery for a wide breadth of device categories from a wide range of vendors. This means a device can dynamically join a network, obtain an IP address, convey its capabilities, and learn about the presence and capabilities of other devices. DHCP and DNS servers are optional and are used only if available on the network, while a device can leave a network smoothly and automatically without leaving any unwanted state issues behind.

UPnP supports 6 protocol stacks for addressing, discovery, description, control, eventing, and presentation, but the Network Printer Card supports only Simple Service Discovery Protocol (SSDP) which allows addressing, description, and discovery.

Configuring UPnP

• **Web Image Monitor SP 3300 Series**: Select **Network Settings** > **UPnP**.

- **Auto IP Enabled**: You can enable or disable Auto IP. When this option is selected, the network print server cannot find the control point and receive an IP address from the control point. The network print server will create an IP address of "169.254.XXX.XXX."

- **Multicast DNS Enabled**: SSDP can use Multicast DNS.

- **SSDP Enabled**: You can enable or disable SSDP.

- **SSDP TTL**: You can specify the maximum number of subnets that SSPD multicasts can travel across.

Using UPnP

If SSDP (Simple Service Discovery Protocol) is enabled, your network print server is checked by a control point. This control point is an application which supports finding UPnP devices. Information on searching and control functions or your network print server's device information is displayed in an XML page (http://xxx.xxx.xxx.xxx:5200/printer.xml).

Printing protocols

Before setting the network printing ports, you must install the printer driver with the local port (LPT) on the system. Refer to your printer user's guide.

Standard TCP/IP port

You can print your documents to your network printer by creating a Standard TCP/IP port.

Configuring Standard TCP/IP in Windows 2000/XP/Vista/Windows Server 2003

You can enable or disable the Standard TCP/IP Printing port through Web Image Monitor SP 3300 Series. Select **Network Settings** > **Raw TCP/IP,LPR,IPP**.

You can also change the port number of the Standard TCP/IP port. The default port number is 9100.

Creating a Standard TCP/IP port

1   In Windows XP, click **Start** > **Printers and Faxes**.

    In Windows 2000/Windows Server 2003, click **Start** > **Settings** > **Printers**.

    In Windows Vista, click **Control Panel** > **Hardware and Sound** > **Printers**.

2   Click **Add a printer** or double-click **Add printer**, and then **Next**.

3   Click **Local printer attached to this computer** and then **Next**.

    Make sure that **Automatically detect and install my Plug and Play printer.** is not selected.

4   Click **Create a new port**, select **Standard TCP/IP Port** from the Type of port list, and click **Next**.

5   Click **Next**.

6   Enter the IP address or DNS name of your network printer and click **Next**.

    For the port name, a default name will be entered by Windows. You can change it to a more user-friendly name.

7   Follow the instructions on the screen to complete installation.

    Now, you can select your printer from the Print Setup dialogue box.

LPR port

LPD, Line Printer Daemon, is the protocol associated with line-printer spooling services. Users can use the printing service from LPD running on a network print server through the LPR port. Most operating systems, such as Microsoft Windows 2000/XP/Vista/Windows Server 2003, support LPR port printing.

Configuring an LPR port

You can enable or disable the LPR Printing port through Web Image Monitor SP 3300 Series. Select **Network Settings** > **Raw TCP/IP,LPR,IPP**. You can also change the port number of LPR/LPD. The default port number is 515.

In Windows 2000/XP/Vista/Windows Server 2003

To add an LPR port to Windows 2000/XP/Vista/Windows Server 2003, users must install a Standard TCP/IP port by default, then change the printing protocol in the printer properties. For installing the Standard TCP/IP port, see page 4.4.

1   In Windows XP, click **Start** > **Printers and Faxes**.

    In Windows 2000/Windows Server 2003, click **Start** > **Settings** > **Printers**.

    In Windows Vista, click **Control Panel** > **Hardware and Sound** > **Printers**.

2   Right-click the printer you want and select **Properties**.

3   Click **Ports**.

4   Make sure that the appropriate Standard TCP/IP port is selected and click **Configure Port**.

5   Select **LPR** from the Protocol section.

6   Enter the print queue name and click **OK**.

7   Click **OK** to close the properties window.

Printer Port

A Network Printer port is used to send print jobs from network computers running Windows OS that do not support the Standard TCP/IP port or LPR port. Adding a Network Printer port

1   From the Windows **Start** menu, select **Settings** > **Printers**.

2   Right-click the printer you want and select **Properties**.

3   Open the **Details** tab and click **Add Port**.

4   Select **Network Printer Port** from the Other list and click **OK**.

5   Select the print server you want to use and click **OK**.

    If you cannot find the print server, click **Add New Print Server to list**, specify information for the print server, such as print server name, IP address, or MAC address, and click **OK**.

6 When the port name displays in the Print to the following port list, click **OK** or **Close**.

IPP port

Internet Printing Protocol (IPP) allows printing across the Internet, meaning that you can send a print job to your printer from a remote place if you are an Internet user, no matter what operating system you use or where you are.

Configuring IPP in the print server

The network administrator must specify information required for IPP, such as the URI (Uniform Resource Identifier).

1 Run your web browser and access Web Image Monitor SP 3300 Series.

2 Click **Network Settings** > **Raw TCP/IP,LPR,IPP**.

3 Configure the IPP parameters:

- **Printer Name**: Enter the network printer's name to be used with IPP printing.

- **Printer URI**: Enter the URL of the printer using the following format: ipp://the IP address of the printer or http://the IP address of the printer:631 (Ex:ipp://168.10.17.82 or http://168.10.17.82:631) 631 is the IPP port number.

- **Printer Information**: Enter additional information about the printer.

- **More Printer Information**: Enter more additional information about the printer.

- **Printer Location**: Enter the name of the location where the printer is physically located.

- **Multiple Operation Timeout**: Enter the time to elapse before the printer ends a print job. When there is no incoming data after the specified number of seconds, the printer ends reception.

- **Time to Keep Jobs in History**: Set the length of time the IPP printer keeps job information.

- **Operator Message**: Enter printer information for printer users.

- **Job Count**: shows the number of print jobs.

- **Driver Installer**: shows the URL where you can get the driver installer.

- **Manufacturer**: shows the URL where you can get manufacturer information.

4 Click **Apply**.

Configuring a Windows client

After the network administrator has configured the network print server, each printer user must install the printer driver and set the print port to IPP 1.1 Port Monitor.

Note: Before following the steps below, each printer user should install the printer driver. If the printer driver is not already installed on the computer, install the printer driver that came with the printer. Select the local port (LPT) when you install the driver.

1 In Windows XP, click **Start** > **Printers and Faxes**.

In Windows 2000/Windows Server 2003, click **Start** > **Settings** > **Printers**.

In Windows Vista, click **Control Panel** > **Hardware and Sound** > **Printers**.

2 Right-click the printer you want and select **Properties**.

3 In Windows 2000/XP/Vista//Windows Server 2003, click **Ports**.

4 Click **Add Port**.

5 Select **IPP Port** from the Other list and click **OK**.

6 Enter the printer URL and port name and click **OK**.

7 When the port name displays on the print port list, click **OK**.

Now you can select the network print server from the Print Setup dialogue box to send a job.

Setting IPP security

Web Image Monitor SP 3300 Series allows administrators to choose an authentication method and to create or modify user accounts.

1 Run your web browser and access Web Image Monitor SP 3300 Series.

2 Click **Network Settings** > **Raw TCP/IP,LPR,IPP**.

- **Authentication Type**: You can set a user name and password encryption method (refer to http digest authentication in RFC).

- **User**: You can set a user name and password for IPP printing. You can set up the user database for up to 10 items.

3 Click **Apply**.

Note: A user name should be unique for all slots and should not include symbols. The length of the user name and the password should each be less than 7 characters.

Additional functions

The following are additional functions you can use through Web Image Monitor SP 3300 Series.

Printer properties settings

You can check and modify printer and document properties for an installed printer. For properties that are not supported by the printer driver, an error message indicating that the property is not supported is displayed. These settings are used only for printing from this system to the printer. However, these settings do not affect the printer properties of the network printer.

Firmware upgrade (HTTP)

You can upgrade your printer's firmware using the HTTP protocol. First, you need to download firmware from the website.

Note: Before upgrading the firmware, make sure that TCP/IP parameters are entered in the print server.

1   Run your web browser and access Web Image Monitor SP 3300 Series.

2   Click **Maintenance** > **Firmware Upgrade**.

3   Insert the CD or download the upgrade from the internet.

4   Click **Browse**, and then select the downloaded new firmware.

5   Click **Upgrade**.

Note: It takes a few minutes to upgrading the firmware.
After completely upgrade, the printer will be reset.

Default setting (HTTP/SNMP)

You can reset all of your network parameter settings to their default status.

Note: All default parameters will be applied after the print server restarts.

IP filtering

This security feature (IP Filtering) provides the ability to prevent unauthorised network access to the network print server based on IP addresses set by a network administrator using Web Image Monitor SP 3300 Series.

1   Run your web browser and access Web Image Monitor SP 3300 Series.

2   Select **Network Settings** > **IP Filtering**.

3   Configure an IP filter.

   • **IP Filtering**: You can enable or disable IP filtering.

   • **IP Address 1** ~ **IP Address 10**: You can enter filtered IP addresses. Users having the IP addresses set here are able to access the network print server.

4   Click **Apply**.

Only system administrators or authorised users can set, via Web Image Monitor SP 3300 Series, IP addresses that can access the device. Up to 10 addresses or ranges of address choices can be made and set. Authorised users are able to change the action (Apply/ Undo) and to print to the network print server.

Note: Ranges of addresses shouldn't contain "null" or "0.0.0.0" values.

Reset

1   Run your web browser and access Web Image Monitor SP 3300 Series.

2   Click **Network Settings** > **Reset**.

You can reboot the network print server, if your network settings are not applied correctly or the network card is disconnected from your network.

Ethernet speed

You can set the communication speed for Ethernet connections.

1   Run your web browser and access Web Image Monitor SP 3300 Series.

2   Click **Network Settings** > **General**.

   • **Speed Rate**: Automatic, 10 Mbps (Harf Duplex),
     10 Mbps (Full Duplex), 100 Mbps (Harf Duplex),
     100 Mbps (Full Duplex). select a Ethernet speed from the drop-down list.

3   Click **Apply**.

5 EtherTalk environment

EtherTalk is AppleTalk used in an Ethernet network. This protocol is widely used in Macintosh network environments. Microsoft Windows system also supports this protocol. Like TCP/IP, EtherTalk also provides packet transmission and routing functionality.

The network printer card works on EtherTalk networks, if the host printer supports PostScript. The description in this chapter applies to network printing from a Macintosh computer.

EtherTalk printing

Printing in an EtherTalk network is possible with several different hardware and software configurations. When you issue a command to print a document, the application begins a series of EtherTalk calls attempting to establish a connection to the printer. The calls first initiate the NBP (Name Binding Protocol) name-lookup process to find the currently selected printer and its EtherTalk address. Then the Printer Access Protocol (PAP) is used to open a connection with the printer.

Once the connection has been established, the workstation and printer interact over a PAP connection. PAP uses lower-level protocols, such as ATP and DDP, to provide a data-stream service for sending print data to the printer.

Configuring EtherTalk

You can configure EtherTalk using the following method:

Web Image Monitor SP 3300 Series

1   Run your web browser.

2   Enter the printer's IP address in the URL field and click **Go**.

3   Select **Network Settings** > **EtherTalk**.

- **EtherTalk Protocol**: allows you to enable or disable the EtherTalk protocol.

- **Printer Name**: allows you to set the printer name for EtherTalk protocol. The default name is RNP+MAC address. This name is automatically displayed on Chooser.

- **Printer Type**: shows the printer type.

- **Last Error Occurred**: shows the last error.

- **RTMP (timer value for aging A-Router entity)**: allows you to set the time in seconds after which the routing table entry maintained by the RTMP protocol times out.

- **PAP (wait time before transmitting a tickle packet)**: enables you to define the time interval in seconds after which the PAP protocol should resend a tickle packet to verify the status of the PAP connection between the printer and your Macintosh.

- **ZIP (current zone)**: shows the AppleTalk Zone name. If there is no configured zone, *(asterisk) should be displayed.

4   Click **Apply**.

Configuring the printer

Note: The following instructions are for Mac OS 10.3, but similar for other versions.

The following steps must be taken to configure the network printer for use on a Macintosh system. If the network printer you want to use is not listed in the printer pop-up menu when you try to print a document, you should add it to your list of available printers.

1   Open the **Applications** folder > **Utilities**, and **Print Setup Utility**.

- For MAC OS 10.5, open **System Preferences** from the **Applications** folder, and click **Printer & Fax**.

2   Click **Printing** > **Set Up Printers**.

3   If the printer already appears in the printer list, select the **In Menu** check box to add it to your list of available printers. You will see the printer in the Printer pop-up menu the next time you print.

4   Click **Add** on the **Printer List**.

- For MAC OS 10.5, press the "**+**" icon then a display window will pop up.

5   For MAC OS 10.3, select the **Rendezvous** tab.

- For MAC OS 10.4, click **Default Browser** and find the **Bonjour**.

- For MAC OS 10.5, click **Default** and find the **Bonjour**.

6   If necessary, choose an AppleTalk zone from the pop-up menu that appears directly below it. Any AppleTalk printers in the zone you have chosen appear in the Printer List.

7   Select the printer in the Printer List.

8   To use printer-specific features, choose the item appropriate for your printer from the Printer Model pop-up menu, then select your printer in the Model Name list.

9   Click **Add**.

The printer appears in the Printer List as the default printer (in boldface). It also appears in the Printer pop-up menu when you print a document.

TCP/IP printing

Apple added TCP/IP printing to all versions including and after OS 8.6.

Note: Ensure that the Macintosh has version 8.6 or later. Earlier versions do not support TCP/IP printing as standard.

An IP printer is a network printer that uses TCP/IP protocols (such as LPD/LPR, IPP, or Socket or Jet Direct) to make itself accessible to your computer. If the IP printer you want to use is not listed when you want to print, you can add it to your list of available printers. To add an IP printer, you need to know its IP address or DNS name.

1   Open the **Applications** folder > **Utilities**, and **Print Setup Utility**.

   • For MAC OS 10.5, open **System Preferences** from the **Applications** folder, and click **Printer & Fax**.

2   Click **Printing** > **Set Up Printers**.

3   If the printer already appears on the Printer List, select the **In Menu** check box to add it to your list of available printers. You will see the printer in the Printer pop-up menu the next time you print.

4   Click **Add** on the **Printer List**.

   • For MAC OS 10.5, press the "**+**" icon then a display window will pop up.

5   For MAC OS 10.3, select the **IP Printing** tab.

   • For MAC OS 10.4, click **IP Printer**.

   • For MAC OS 10.5, click **IP**.

6   Select the appropriate printing protocol from the Printer Type pop-up menu.

7   Enter the IP address or DNS name for the printer in the Printer Address field.

8   If your printer requires it, type the queue name for your printer in the Queue Name field.

9   To use printer-specific features, choose the item appropriate for your printer from the Printer Model pop-up menu, then select your printer in the Model Name list.

10 Click **Add**.

   The printer appears on the Printer List as the default printer (in boldface). It also appears in the Printer pop-up menu when you print a document.

Bonjour printer

Usually used in Macintosh networks to search for network devices, Bonjour consists of IPv4 Link-Local Addressing, Multicast DNS, and DNS Service Discovery. Known as zero configuration networking, Bonjour uses industry standard IP protocols to allow devices to automatically find each other without the need to enter IP addresses or configure DNS servers.

In order to provide a true zero configuration experience, meaning that you do not need to configure network parameters, the printer MUST have Bonjour enabled by default. It is NOT possible to disable any part of Bonjour.

After boot up, check the Bonjour printer name of this printer network card in Mac OS X.

1   Open the **Applications** folder > **Utilities**, and **Print Setup Utility**.

   • For MAC OS 10.5, open **System Preferences** from the **Applications** folder, and click **Printer & Fax**.

2   Click **Printing** > **Set Up Printers**.

3   If the printer already appears on the Printer List, select the **In Menu** check box to add it to your list of available printers. You will see the printer in the Printer pop-up menu the next time you print.

4   Click **Add** on the **Printer List**.

   • For MAC OS 10.5, press the "**+**" icon then a display window will pop up.

5   For MAC OS 10.3, select the **Rendezvous** tab.

   • For MAC OS 10.4, click **Default Browser** and find the **Bonjour**.

   • For MAC OS 10.5, click **Default** and find the **Bonjour**.

   Any Bonjour-enabled printers on your local network or subnetwork appear on the Printer List.

6   Select your printer from the Printer List.

7   To use printer-specific features, choose the item appropriate for your printer from the Printer Model pop-up menu, then select your printer in the Model Name list.

8   Click **Add**.

   The printer appears on the Printer List as the default printer (in boldface). It also appears in the Printer pop-up menu when you print a document.

6 Administration Tools

This chapter explains how to configure or use the various administration tools found in SP 3300 Series. The following information is provided:

Maintenance using Internet Services

Enabling Internet Services

1 At a client workstation on the network, launch the Internet Browser.

2 In the URL field, enter http:// followed by the IP Address of the SP 3300 Series. Then select the **[Enter]** key.

Example: If the IP Address is 192.168.100.100, enter the following in the URL field:

http://192.168.100.100

Checking Printer Status

Use these instructions to check the status of SP 3300 Series, the paper trays and consumables.

To check the status, perform these steps:

1 Enable SP 3300 Series (see "Enabling Internet Services" on page 6.1).

2 At SP 3300 Series Home Page for SP 3300 Series, select the **Information** tab.

3 Click **Print Information** in the left frame.

Printing Reports

Use these instructions to print the printer's reports or to send a test print file to SP 3300 Series.

To print reports, perform these steps:

1 Enable SP 3300 Series (see "Enabling Internet Services" on page 6.1).

2 At SP 3300 Series Home Page for SP 3300 Series, select the **Information** tab.

3 Click **Print Information** menu in the left frame. Then click the appropriate **Print** link to print:

Print Information

• Print Printer Configuration Page

• Print Demo Page

• Print Menu Map

• Print PCL Font List

• Print PS3 Font List

Network Information Page

• Print Network Configuration Page

Making and Changing Network Admin Password

Use these instructions to change the admin user's password.

To make admin user's password settings, perform these steps:

1 Enable SP 3300 Series (see "Enabling Internet Services" on page 6.1).

2 At SP 3300 Series Home Page for SP 3300 Series, select the **Maintenance** tab.

3 Click **Security** menu in the left frame.

4 Select the checkbox to **Enable Security** for using security.

5 To change the Admin User Password, in the change Admin User Name and Password area:

Enter the **New Admin Name** and **Old Admin Name**.

Enter the **New Admin Password** and **Old Admin Password**.

6 Click the **Apply** button to implement any changes.

Note: Click the **Undo** button to cancel any changes made and return to the previous values.

Upgrading Firmware

Firmware upgrades may supplied on a CD or as a download from the internet. Use these instructions to install firmware upgrades in SP 3300 Series.

To upgrade the firmware, perform these steps:

1 Enable SP 3300 Series (see "Enabling Internet Services" on page 6.1).

2 At SP 3300 Series Home Page for SP 3300 Series, select the **Maintenance** tab.

3 Click **Firmware Upgrade** in the left frame.

4 Insert the CD or download the upgrade from the internet.

5 Enter the file name and location or **Browse** to the location and select the file.

6 Click the **Upgrade** button.

7 Appendix

Specifications

Items	Specifications
Supported networks	• Windows: 2000, XP, Vista, Windows Server 2003 • Macintosh: MAC OS 8.6 ~ 9.2, 10.1 ~ 10.5
Protocol	TCP/IP, EtherTalk, SNMP, HTTP 1.1, Bonjour
Configurationu tilities	SetIP, Web Image Monitor SP 3300 Series

Hardware requirements	• PC:
	  - 80486 CPU or higher
	  - Minimum of 16 MB of RAM
	  - 2 MB of free disk space
	• Macintosh:
	  - PowerPC 68020 or higher
	  - Minimum of 8 MB of RAM
	  - 2 MB of free disk space

Wireless interface	IEEE 802.11a/b/g standard

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